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Organ of the Medical Association of South Africa



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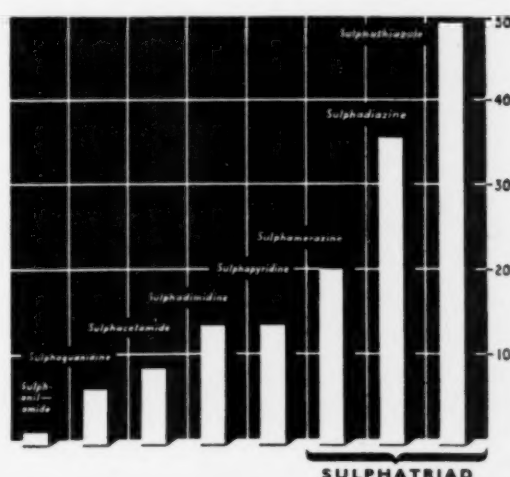
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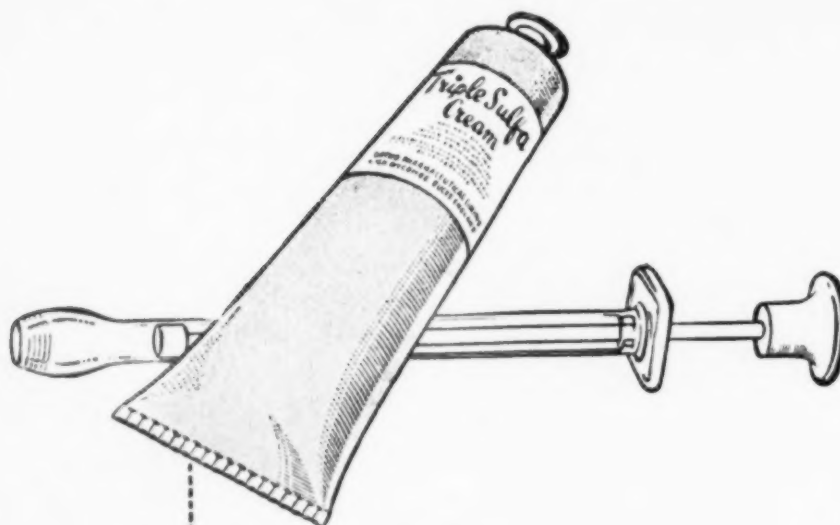
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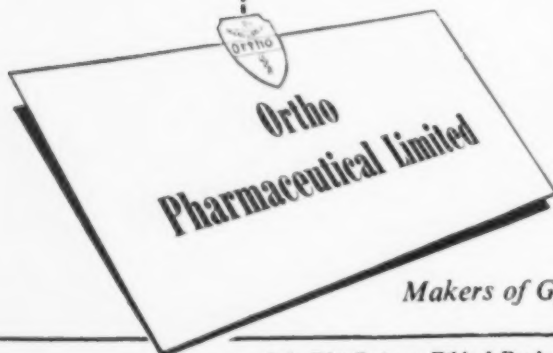
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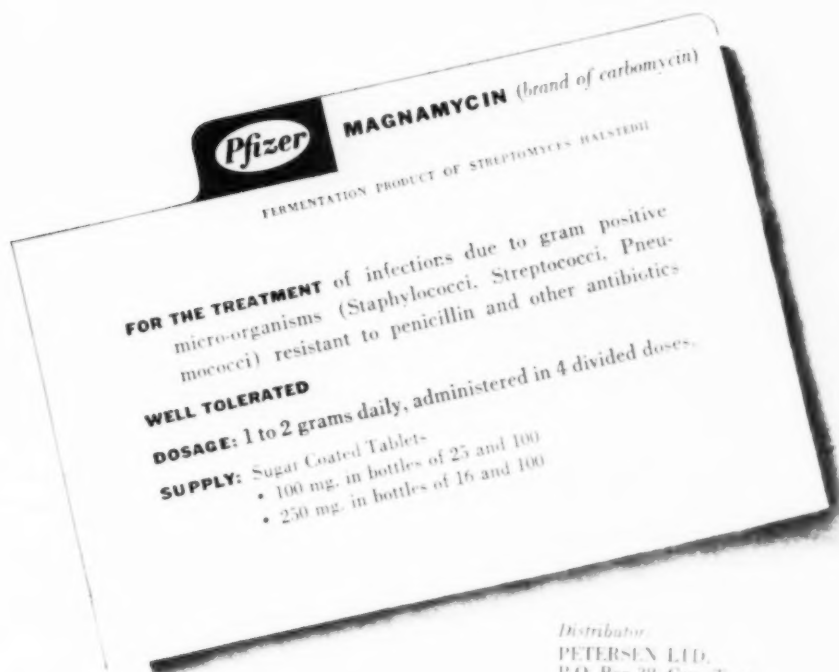
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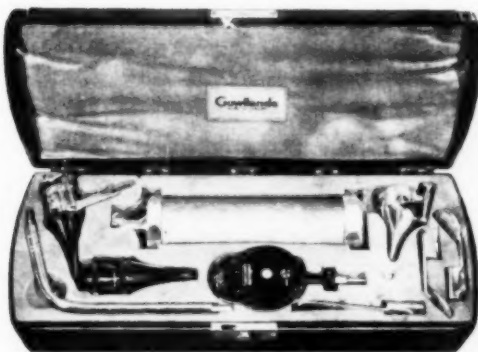
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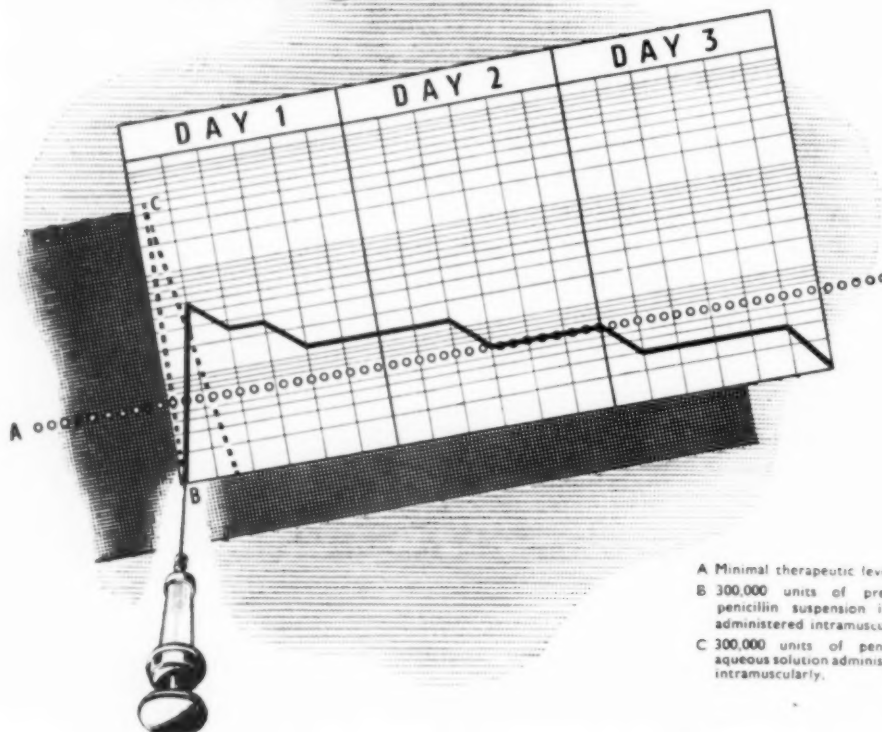
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### ONYALAI

W. E. LAUFER, M.B., Ch.B.,

*Late Medical Officer, Bechuanaland Protectorate*

**Definition.** Onyalai is a bleeding disease which characteristically occurs in Africans. The features are haemorrhages from the mucous membranes and into the skin, and the presence of haemorrhagic bullae in or on the mucous membranes.

#### ETIOLOGY

The ultimate etiology remains obscure, but many observers regard Onyalai as the equivalent of thrombocytopenic purpura in the European. The cause of the thrombocytopenia remains obscure, though some observers have postulated that it is due to the use of Native medicines. In my own experience Onyalai is by no means invariably accompanied by a thrombocytopenia, and I believe the disease to be of allergic origin.

These two statements will be further elaborated later in this paper. However, the causative allergen remains unknown.

#### PATHOLOGY

The characteristic lesions are haemorrhagic vesicles or bullae situated in or on the mucous membranes. These vesicles may be single or grouped, and are often trabeculated, though by no means invariably so. They vary in size, and on the average are about the size of a match head. In the mouth they are seen on the tongue, gums and cheeks; in the nose on the septum and turbinates; in the chest in the bronchial tree; in the abdomen in the mucosa of the stomach, intestines and rectum; and in the renal pelvis and ureters. They also occur in the uterus and vagina, and in the bladder and urethra. Subconjunctival haemorrhages are common, but are unaccompanied by vesicles. Purpuric cutaneous haemorrhages are also common, but again vesicles are not seen in the skin.

**Haematology.** The red cell count is decreased, i.e. there is a post-haemorrhagic anaemia.

The white cell count is variable, in most cases showing a leucocytosis, also post-haemorrhagic.

The platelets are said to be markedly decreased or even absent. In the 19 cases analysed here 9 showed a low

platelet count, i.e. below 150,000 per c.mm., the other 10 showing relatively normal counts.

When one considers that even minor haemorrhages are normally accompanied by a thrombocytosis, then in these cases there is an absent platelet response to bleeding, though one cannot contend that the bleeding was due to thrombocytopenia. In no case in this series were platelets completely absent from the blood smear.

The bleeding time was invariably prolonged.

The coagulation time was normal.

The capillary fragility was increased in 11 cases out of 19.

**Methods Used.** Platelets were counted in the usual counting chamber.

Bleeding time was estimated by the pin-prick and blotting paper method.

Coagulation time was estimated by teasing drops of blood on a slide at regular intervals.

Capillary fragility was tested by applying a sphygmomanometer cuff to arm and leg.

Blood slides were done in all cases, particular note being taken of the differential white-cell count, but eosinophilia was not a constant or reliable feature.

#### CLINICAL PICTURE

The patient may be of any age or either sex, though most cases occur before middle life. The sexes are about equally affected, though males preponderate slightly. The numbers of adults and children affected are about equal. No predisposing causes are known and, though second attacks of Onyalai occur in the occasional patient, one attack does not predispose to another. In my experience Onyalai is not a familial disease. There seems to be no seasonal variation in the occurrence of cases.

The presenting complaint is bleeding, most commonly from the mouth and nose, but sometimes from other sites. Most cases bleeding from sites other than the mouth and nose show bleeding from these orifices as well, but the occasional case starts bleeding from another site entirely. Thus one female patient presented with profuse vaginal bleeding and the vesicles developed in the mouth only



subsequently. I have not yet seen an Onyalai patient who did not bleed from the nose and/or mouth. There may be haemoptysis, haematemesis (the latter due to gastric lesions or to swallowed blood), haematuria, bloody diarrhoea, or vaginal or uterine bleeding. The onset is sudden, and the patient is at a loss to attribute a cause to it.

*Signs.* On examination the patient is usually febrile, the temperature being variable. The pulse is fast. Severe cases are drowsy. There is a characteristic smell to these patients, difficult to describe, but quite unmistakable once one has experienced it. The characteristic vesicles are found in the mouth and nose, and subconjunctival haemorrhages, unilateral or bilateral, are commonly present. Apart from these findings, physical examination is in my experience entirely negative, except that purpuric spots occur commonly in the skin, though by no means in all cases; but they must be diligently sought, as their detection in dark-skinned people is not easy. Some observers mention bilateral parotid swellings in Onyalai, but personally I have not yet seen these.

Inspection of the urine or stools will show blood present in some cases.

*Complications.* There are no complications characteristic of Onyalai, but oral sepsis may develop, as may pneumonia, and transient congestive cardiac failure, the latter from prolonged and severe blood loss. In other words, complications are those of any other haemorrhagic state.

#### DIAGNOSIS

This presents no real difficulty, as the characteristic blood-filled vesicles occur in very few other diseases. Cases of snake bite, particularly by members of the cobra family, sometimes show haemorrhagic phenomena, but here there is a definite history, the fang marks of the snake can be seen, and vesicles do not occur in the mouth and nose in snake bite. In spite of this, one has seen cases of snake bite sent to hospital as Onyalai, and the delay in giving antivenene may be tragic.

#### PROGNOSIS

Here I must draw on my personal experience, as discussions with other observers and reference to the literature are confusing. Some observers state that the mortality is 50%, others have had higher or lower numbers of deaths. Enquiries made amongst responsible Africans, to whom the disease is quite familiar, seem to indicate that the mortality is above 50%. In my own experience the mortality is about 30% in cases treated by conventional methods. There is no real guide to prognosis. Cases showing haematuria, haemoptysis, and bloody diarrhoea may recover, while patients bleeding from the mouth and nose only may die. Again the patient with a profuse crop of vesicles bleeding very severely may recover, while another showing only a few vesicles may succumb. Onyalai is not a common disease, and opportunities for post-mortem examinations of such cases are few; thus the ultimate cause of death is by no means certain. It may well be that, apart from massive haemorrhages from the sites already indicated, haemorrhages into the cardiac muscle or into the vital centres of the central nervous system may be the terminal event.

#### TREATMENT

Various methods of treatment have been suggested, including autohaemotherapy, large doses of vitamin C, calcium gluconate injections, and vitamin K injections, in an attempt to increase the coagulability of the blood and to control the bleeding. Since the coagulation time of the blood is normal in this disease, and the lesion is a capillary defect, i.e. an increased capillary fragility, in my opinion due to allergic factors, I hold that it is irrational to administer calcium and vitamins to control the bleeding. Blood transfusions may be required in severe cases to replace the blood lost. In my hands shot-gun therapy with calcium and vitamins has given very poor results. Believing Onyalai to be an allergic disease, I have for the last 3 years been using adrenaline combined with antihistamine drugs in its treatment. Twenty consecutive cases treated thus have all recovered. The antihistamines used have been promethazine (Phenergan) and mepyramine (Anthisan).

My routine treatment is now as follows:

Adrenaline 1 : 1,000 is given hypodermically twice a day, the maximum adult dose being 10 minims. This is continued for 2 or 3 days, and may be continued longer, though I have not found this necessary so far.

Anthisan, 0.10 gm. tablets, is given 3 times a day; one tablet t.d.s. Phenergan, 0.025 gm. tablets, may also be used, one tablet t.d.s. The antihistamine drugs are continued for 5 to 7 days, and dosage varies according to age. The routine toilet of the mouth is performed, and an iron mixture is given from the start. Since adopting this treatment, blood transfusions have so far been unnecessary.

#### RESULTS

Twenty consecutive cases have hitherto been treated by this method, and all have recovered. In this series haemorrhage has stopped at the end of 48 hours in most instances, though in a few cases it has taken 72 hours for bleeding to cease. Should I come across a case bleeding longer than 72 hours, I should continue the adrenaline injections longer than 3 days, but so far there has been no need to do so.

One cannot draw final conclusions from 20 cases, except that one can say that the results of this treatment have so far been gratifying.

Table I shows some haematological features of 19 cases of Onyalai, but not all these have been treated by adrenaline and antihistamines.

#### CONCLUSIONS

As a result of haematological studies in 19 cases of Onyalai, it is suggested that this is a disease of the capillaries, possibly of allergic origin. Successful treatment of 20 consecutive cases by a combination of adrenaline and antihistamine drugs supports this suggestion.

#### SUMMARY

The clinical and haematological aspects of Onyalai are briefly discussed, and a new method of treatment, using

TABLE 1: DATA IN ONYALAI CASES

Case			Platelets thousands per c.mm.			Coagulation Time minutes			Bleeding Time minutes			Capillary Fragility Test on Admission	Clinical Features
No.	Age	Sex	1	2	3	1	2	3	1	2	3		
1	4	M	111	132	125	0.5	1.0	2.0	9.0	6.5	5.0	+	Vesicles + Epistaxis + Sub-conj. haem.
2	5	M	75	94	171	2.0	3.0	2.5	7.0	6.5	4.0	+	Vesicles + Haemoptysis
3	9	F	116	234	189	2.0	2.5	1.5	6.5	8.5	5.5	+	Vesicles + Epistaxis
4	40	M	201	219	184	1.0	1.0	1.0	5.0	5.5	4.5	+	Vesicles + Epistaxis
5	23	F	175	178	145	2.0	2.5	2.0	4.5	4.5	4.0	+	Vesicles + Epistaxis + Sub-conj. haem.
6	2	F	210	204	210	1.5	1.5	2.0	5.0	6.5	5.0	+	Epistaxis preceding Vesicles
7	9	M	200	117	135	2.0	1.5	2.5	6.5	7.5	4.0	+	Vesicles + Epistaxis
8	36	M	140	125	175	2.5	2.0	—	5.5	7.5	4.5	+	Vesicles + Haematuria
9	50	M	270	250	210	3.0	2.0	2.5	4.5	6.5	5.5	+	Vesicles + Epistaxis
10	10	M	125	175	195	4.0	4.0	4.0	5.5	6.5	4.0	+	Vesicles + Epistaxis
11	38	F	175	190	220	3.5	3.5	2.5	9.0	7.0	5.5	+	Vesicles + Haematuria
12	11	M	320	240	190	2.0	2.0	2.5	5.0	6.0	5.5	+	Vesicles + Epistaxis
13	27	M	120	—	—	3.0	—	—	7.5	—	—	+	Vesicles + Haemoptysis
14	10	M	160	175	400	3.5	3.0	2.0	8.5	8.0	5.0	+	Vesicles + Epistaxis
15	18	F	220	—	—	1.5	—	—	7.5	—	—	+	Vesicles + Epistaxis
16	9	F	180	140	340	3.0	3.0	3.0	9.5	8.0	5.0	+	Vesicles + Bloody Diarrhoea
17	17	F	110	94	200	2.5	2.5	3.0	6.5	5.5	4.0	+	Profuse Vaginal Bleeding. Vesicles later
18	14	M	48	42	100	2.0	2.0	2.0	7.0	5.0	3.0	+	Vesicles + Epistaxis + Sub-conj. haem.
19	10	F	80	72	140	2.5	2.5	2.0	6.0	6.0	3.5	+	Vesicles + Epistaxis + Sub-conj. haem.

The numbers 1 2 3 at head of column *Platelets*, *Coagulation Time* and *Bleeding Time* refer to investigations made on admission, 48 hours later, and on discharge.

Patients were discharged when all evidence of bleeding had ceased.

Patient 13 died in hospital, and patient 15 absconded but died at home.

adrenaline and antihistamines, is described, with results in 20 cases. A table showing some features of 19 cases is appended.

Thanks are due to Dr. M. L. Freedman, O.B.E., Director of Medical Services, Bechuanaland Protectorate, for comments and for permission to publish this paper.

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## LEPROSY IN SOUTH AFRICA

A. R. DAVISON, M.R.C.S. (ENG.), L.R.C.P. (LOND.)

Medical Superintendent, Westfort Institution, Pretoria

At international leprosy conferences, the segregation of all infectious cases of leprosy has been accepted as the ideal method of controlling this disease, but the expense involved has precluded most countries in which leprosy constitutes a public health problem from adopting this measure. Thanks to the foresight of the Union's early public health administrators, this method of control has been followed effectively in South Africa for many years and at the present time the incidence of the disease is estimated to be 0.77 cases per 1,000 of the population. This compares most favourably with the incidence in countries bordering on the Union of South Africa, viz. Southern Rhodesia and Swaziland with an estimated 5.5 and 11.5 cases per 1,000 of population respectively (Rogers and Muir, 1946.) Had the policy of segregation not been followed it is reasonable to assume that the incidence of the disease in South Africa would have been as high

as that in the neighbouring territories. This might have meant a total in the Union of 100,000 patients instead of approximately 6,000, only 2,000 of whom are still in the institutions. In other words, leprosy would have constituted as formidable a problem as tuberculosis does today.

Although the cost of segregating leprosy patients in its 5 institutions exceeds £250,000 per annum, the Union is fortunate in being able to bear this expenditure. In addition to receiving free medical and nursing care, patients are accommodated, fed and clothed at the expense of the State.

The fact that patients are segregated primarily in the interests of public health and only secondarily in their own interests would for economic reasons justify the maintenance of one large central institution. However, in order to make segregation as little irksome as possible, 5

institutions have been established in different parts of the country, having due regard to the high-incidence areas. This arrangement ensures that patients are institutionalized as near to their homes and relatives as possible. The largest institution, Westfort, Pretoria, serves the Transvaal, Orange Free State and the greater part of the Cape Province. The other institutions are situated at Bochem (Northern Transvaal), Amatikulu (Natal), Mkambati (Pondoland) and Emjanyana (Transkei). The latter institution also serves the Eastern Cape.

The welfare of the patients detained in these institutions is regarded as a matter of paramount importance and to this end the State, in addition to ensuring that patients are directed to the nearest institution, also facilitates visits by relatives by providing them with free transport by rail and bus, as well as free board and lodging at the institution.

Where the patient has been the bread-winner of the family the Government gives maintenance grants to the dependants. Patients who desire to work in the institutions earn wages which can be spent on themselves or sent to their relatives. Agricultural land is also made available to those who desire to till it for their own profit. One patient in the Bochem institution (Northern Transvaal) in one season received £102 from the sale of kaffircorn he produced.

In the early days, when leprosy was considered incurable, the institutions were administered by the Department of Interior (which incidentally also had charge of the prisons). In 1919 Dr. J. Alexander Mitchell became Secretary for Public Health and he subsequently was instrumental in having the leper institutions transferred to the control of the Department of Public Health. Since then, over 12,000 cases have been discharged from the institutions.

Whereas 20 years ago patients concealed their disease for about 10 years before receiving treatment, the duration of the disease before admission to institutions at the present time is about 2 years, with the result that the majority of patients are fit for discharge within 12 months of their admission to hospital. One institution during 1952 discharged 73% of its inmates.

The eagerness of the patients for sport, particularly football, is an indication of their physical fitness and general well-being. At Westfort, in the Transvaal, the life of a practice soccer-ball is 2 weeks.

Schools, staffed by qualified teachers, are provided for child patients. In addition to physical training, which forms an important part of the curriculum, boys are taught gardening and girls sewing and basket-making. As in normal walks of life, schools are not always popular with the children, and the request of a boy aged 14 to leave school on the grounds that, having passed standard Sub-B, he was 'fully educated' could not be agreed to.

The spiritual needs of the patients are met by the provision of places of worship for the adherents of the Anglican, Dutch Reformed, Swiss Mission and Roman Catholic churches. The stipends of the ministers are paid by the Department of Health.

The medical care of the patients is undertaken by the medical superintendents, assisted by either full- or part-time medical officers and European or non-European

nurses. Native medical aids, who hold the B.Sc. degree in hygiene, are stationed at all the institutions and, in addition, a research medical officer is stationed at Westfort, Pretoria.

The institutions employ the latest methods of treatment and these are freely available to all patients desiring treatment. Whereas previously treatment with chaulmoogra oil was effective in clearing up the signs of neural leprosy, it proved ineffective in lepromatous cases, which entered the institutions only to die there. The advent of the sulphones, however, has brought about a dramatic change in the prognosis of all types of the disease.

At Westfort, in the 5 years preceding the introduction of the sulphones, the average death rate per annum was 94. After 5 years of sulphone therapy, the death rate has fallen to 49 per annum.

As clinical improvement with sulphone therapy is rapid, the majority of neural cases, in whom the bacilli cannot be demonstrated, are fit for discharge within 12 months of entering the institution. In the lepromatous type clinical improvement is also fairly rapid and ulcers and laryngeal stenosis are now rarely encountered. The elimination of bacilli, however, is a slow process and some advanced cases continue to demonstrate bacilli even after 5 years' treatment. Naturally, the earlier a case comes under treatment the quicker is the response.

The criteria for determining whether the disease has been arrested are strict. Patients in whom bacilli have been demonstrated are not discharged until 12 monthly examinations have revealed their absence in the skin or nose. Frequent bacteriological checks, each of which consists of a minimum of 6 smears taken from different parts of the body on the same day, are an essential requirement. If all the tests prove satisfactory the patient is discharged provisionally. Thereafter he is kept under observation at home for a further period of 6 years before being given a complete discharge.

In addition to the routine sulphone treatment various other medicaments, either alone or in combination with the sulphones, are being used experimentally. Among the promising drugs being tested are streptomycin, para-aminosalicylic acid (PAS), thiosemicarbazone and, more recently, isonicotinic acid hydrazide (INH). Parallel controlled experiments along these lines are being carried out in conjunction with institutions in the Philippines and in Japan. These experiments are under the control of the American Leonard Wood Memorial Leprosy Relief Association, which recently organized an international conference in Japan at which South Africa was represented.

The results of segregation combined with treatment are clearly noticeable in those races or tribes which are aware of and which appreciate the facilities available to them. For example, in 1916 there were 198 European patients in South African institutions. In 1953 there were only 56, eight of whom, although cured, remain in the institution at their own request. The Cape Coloured patients in 1913 numbered 345. At the present time there are only 65. The Xosa, Fingo and Pondo tribes, which appreciate the nature of the disease and the benefits derived from early treatment do not hesitate to use the institutions provided for them; and the number of patients from these

tribes has decreased from their highest total of approximately 1,250 to 648 in 1953.

In both the Transvaal and Natal large numbers of Natives who mainly live in remote areas difficult of access are ignorant of European medicine and unaware of the facilities available to them. Believing in withcraft, they generally sought treatment at the hands of witch-doctors. It was found that 40% of the admissions to Westfort had no knowledge of leprosy and 80% did not know that leprosy institutions existed. This ignorance accounted for their failure to come forward for treatment, but in recent years the number of admissions has increased, and, in

those admitted, the duration of the disease has also dropped to an average of 2 years before admission. Consequently patients are physically fitter and without deformity and, what is more important, the possibility of spreading the disease has been reduced considerably.

The present situation, with early cases coming for treatment, with cases being discharged unutilized, and with fewer cases being infected, can therefore give cause for satisfaction, and we can confidently state that the policy of compulsory segregation when it is humanely applied as it is in the Union of South Africa is a successful public health measure and an inestimable boon to the patient.

## SIMULTANEOUS FULL-TERM INTRA- AND EXTRA-UTERINE PREGNANCY IN A NATIVE FEMALE

### A CASE REPORT

A. J. LOXTON, M.B., Ch.B.

Settlers' Hospital, Grahamstown

On 11 June 1952 a Native female aged 35 years was admitted to the Settlers' Hospital, Grahamstown, as a case of complicated labour.

*Previous History.* Seven children; normal confinements; two died of gastro-enteritis.

*Present History.* Since the early part of pregnancy patient has complained of pain in the lower abdomen, especially in the left iliac fossa.

Labour started on the morning of 8 June 1952, progressed well and a child was born alive next morning. Placenta delivered.

The patient then felt a tumour about the size of a full-term pregnancy in the abdomen, and experienced movement of it, but no labour pains. On 10 June medical aid was enlisted and next day patient was admitted to hospital.

*On Examination.* General condition good. Temperature and pulse normal.

*Abdominally.* The outlines of a foetus lying in transverse position with its back to the mother's pubis could be palpated very distinctly, as with a very thin, lax uterine wall. Foetal movements were evident and foetal heart was 140 and auscultated to the right of the umbilicus.

Behind and above the mother's pubis a round fixed tumour about the size of a large fist could be palpated.

Diagnosis was made of obstructed labour caused probably by fibromyoma or ovarian cyst in the true pelvis, and patient was prepared for Caesarean section.

*Operation.* On the abdomen being opened the foetus was found to lie transversely with head to mother's right flank and back to pubis. Size—full-term.

The left broad ligament was stretched to very thin tissue to cover the foetus. Of the left ovary and Fallopian tube there were no signs. On the mother's left side somewhere near the left ovarian fossa the placenta was found adherent to the interior of the sac. The placenta had three sources of blood supply, from: (a) the omentum, which was adherent to the outside of the sac and supplied 3 or 4 fair-sized vessels, (b) the ovarian artery, greatly hypertrophied to about the size of the average brachial artery, and (c) the ovarian branch of the uterine artery, also greatly hypertrophied.

The pedicle of the sac was found approximately 4 inches broad and contained the ovarian vessels and the ovarian branch of the uterine artery.

A normally-contracted uterus was found in the true pelvis.

The sac was opened and a live foetus delivered. The adherent omentum was ligated and severed, the pedicle of the sac sutured and sac removed. Right-sided salpingectomy was performed and the abdomen closed up.

A fortnight later mother and baby were discharged after an uneventful recovery.

I wish to express my thanks to Dr. J. W. Gehle under whom the case was admitted.

### ABSTRACT

C. W. Scott *et al.* (1953): *Neonatal Granuloma Venereum*. Amer. J. Dis. Children, 85, 308.

The authors claim that this is the first reported case of Granuloma Venereum in a 5-months-old infant.

The right post-auricular area, right radius, umbilicus and

penis were infected. Donovan bodies were identified in the granulating mass behind the ear after an abscess had formed.

The mother was found to have granulomatous lesions of the vulva in which Donovan bodies were found. There was a tear of the fourchette. The lesions in the infant healed when treated with streptomycin.



# South African Medical Journal

## Suid-Afrikaanse Tydskrif vir Geneeskunde

### VAN DIE REDAKSIE

#### DIËTIESE CHOLESTEROL

Die statistieke van sterftesertifisering in verskeie lande van die wêreld gedurende onlangse dekades toon 'n merkwaardige toename in sterfgevälle aan kroonvatsiektes, en die ondervinding van praktiserende geneeshere dui daarop dat die skynbare toename reël is. Geneeshere het vir baie jare besef dat kroonslagaaarverharding en hartkramp 'aandoenings van die beter klasse, nie van die werkende klasse' is nie (Osler). In Amerika word dit gesê dat byna een uit elke drie geneeshere aan kroonvatsiektes sterf. Die oorsaak van die siekte en van die wisseling van voorkoms by verskillende klasse en verskillende tye was 'n onderwerp van bespieëling en navorsing<sup>1</sup>; en die mees waarskynlike oorsakende faktore word algemeen beskou as (a) dieetkundig, en (b) die inspanning en spanning van die lewe.

Cholesterol was gedemonstreer in die aterosklerotiese plate, en die diëte van dié wat die letsels ontwikkel was ryk aan cholesterol bevind. Hierdie bevindings het die menings van 'n groot aantal betroubare werkers versterk, dat die letsels ernstiger is by mense wat vryelik eet of eier- en melkprodukte gebruik, as by dié wat net graansoorte, groente, vrugte, vis en vleis eet. Cholesterol is 'n normale bestanddeel van die liggaam wat van voedselbestanddele, ander as cholesterol, in die dieet voortgebring word. Endogene cholesterol word egter nie beskou om enige rol te speel in aterosklerose nie, behalwe in sommige proefnemings waar hene groot dosisse van estrogens vir betreklike lang tydperke gegee was, en miskien by sommige menslike slagoffers met hipercholesterolemie wat cholesterol in groot hoeveelhede selfs op cholesterol-vrye diëte, en die gal afskei. Met meer onlangse eksperimente op konyne waarby die gebruik van 'gemerkte' cholesterol (bevattende radio-aktiewe waterstof) betrokke was, was dit gedemonstreer dat dit hoofsaaklik eksogene cholesterol is wat in ateromatose neerslae vorm. Hoewel baie pogings, op verskeie maniere aangewend was om aterosklerose letsels by soogdiere voort te bring, het geeneen nog geslaag nie, behalwe deur cholesterol by die diëte te voeg. Omgekeerd lei die beperking van diëtiese cholesterol wat in tyd van oorlog voorkom tot 'n afname van aterosklerose, niteenstaande dat bekommernis en spanning en ander faktore vermag mag word om die voorkoms van sogenaamde vervallingsiektes in tyd van oorlog te verhoog.

Na langdurige toediening van oormatige cholesterol in die diëte beide by die mens en proefdier toon 'n paar individue egter vir een of ander onverklaarbare rede min vermeerdering in die cholesterol van die bloed en geen aterosklerose.

1. S. Afr. Med. Tydskrif (1953): 27, 477.

### EDITORIAL

#### DIETARY CHOLESTEROL

The statistics of death certification in various countries of the world indicate during recent decades a remarkable increase in mortality from diseases of the coronary vessels, and the experience of practising physicians goes to show that the apparent increase is real. Physicians have recognized for many years that coronary atherosclerosis and angina pectoris are 'afflictions of the better classes, not of the working classes' (Osler). In America it is stated that nearly one out of every three physicians dies from coronary disease. The cause of the disease and of the variation in incidence in different classes and different times has been a subject of speculation and research<sup>1</sup>; and the most likely causative factors are generally considered to be (a) dietetic, and (b) the strain and tension of life.

Cholesterol has been demonstrated in the atherosclerotic plaques, and the diets of those developing the lesions have been found to be rich in cholesterol. These findings have reinforced the views held by many reliable workers that the lesions are more severe in people who eat freely of egg and milk products than in those who eat only cereals, vegetables, fruit, fish and meat. Cholesterol is a normal body constituent, produced from food elements other than cholesterol in the diet. Endogenous cholesterol however is not believed ordinarily to play any part in atherosclerosis except in some experiments in which hens have been given large doses of oestrogens for relatively long periods, and perhaps in some human subjects with hypercholesterolaemia who excrete cholesterol in large amounts in the bile even when on cholesterol-free diets. In experiments on rabbits, more recently involving the use of 'tagged' cholesterol (containing radio-active hydrogen), it has been demonstrated that it is mainly exogenous cholesterol that is deposited in atheromatous deposits. Although many attempts have been made in diverse ways to produce atherosclerotic lesions in mammals, no one has yet succeeded except by adding cholesterol to the diet. Contrariwise, the restriction of dietary cholesterol that occurs in wartime leads to a decrease in atherosclerosis, notwithstanding that worry and tension and other factors might be expected to increase the incidence of so-called degenerative diseases in wartime.

In both man and experimental animals, however, a few individuals for some unexplained reason show little increase in the blood cholesterol and no atherosclerosis after prolonged administration of excess of cholesterol in the diet.

1. S. Afr. Med. J. (1953): 27, 477.

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Die vername plek wat eksogene cholesterol en ander lipiede liggame ingeneem het, in verhouding tot hierdie belangrike oorsaak van dood, word gevolg deur onvermydelike vrae oor dieetkundige dogma en praktyk. Eiers en suiwelprodukte is, algemeen gesproke, waardevolle en inderdaad onmisbare voedselsoorte. Dit sal belanglik wees om aan die publiek voor te hou dat hulle ongesond is, en, nog meer dat hulle gevaarlik is. Die geneesheer mag dit as nodig beskou om 'n individuele pasiënt raad of 'n waarskuwing te gee aangaande hoe en tot watter mate hy hierdie voedingstowwe moet gebruik. Dit is denkbaar dat verdere navorsing mag suggereer dat soortgelyke advies aan sekere klasse mense, volgens ouderdom, beroep, ens., gegee mag word. Maar sover die huidige kennis strek, sal dit verkeerd wees om algemene stellings te maak, wat die voedsaamheid van eiers en botter in twyfel trek. Daar was in die verlede te veel dogmatiese propaganda omtrent dieet. Benewens onkunde en giere wat die basis is van baie bekende 'sisteme' van dieet, was verantwoordelike mediese skrywers te gereed om die gemeenskaplike diëtiese advies wat nie op gesonde wetenskaplike grondslag gebaseer is nie, op die voorgrond te stel. Daar is gegronde diëtiese beginsels wat die publiek moet ken en verstaan, maar daar is behoefte aan groot versigtigheid met die omskepping van wetenskaplike teorieë in amptelike advies aan die gemeenskap.

The prominence into which exogenous cholesterol and other lipid bodies have come in relation to this important cause of death brings in its train unavoidable questions of dietetic doctrine and practice. Eggs and dairy produce are, broadly speaking, valuable and indeed indispensable articles of diet. It would be absurd to suggest to the public that they are unwholesome, and still more, that they are dangerous. The doctor may consider it necessary to give an individual patient advice or caution as to how and to what extent he should use these food substances. It is conceivable that further research may suggest that similar advice might be issued to certain classes of people, according to age, occupation, etc. But in the present state of knowledge it would be wrong to make general statements throwing doubt on the wholesomeness of eggs and butter. There has in the past been too much dogmatic propaganda about diet. Apart from the ignorance and faddism that are the basis of some named 'systems' of diet, responsible medical publicists have been too ready to press on the community dietetic advice not based on sound scientific foundations. There are well-founded dietetic principles that the public should know and understand, but there is need for great caution in converting scientific theories into official advice to the community.

## THE POST-PHLEBITIC SYNDROME OF THE LOWER LIMB

I. NORWICH, F.R.C.S.\*

*Edenvale Hospital*

It is the purpose of this paper to indicate the high incidence of the post-phlebitic syndrome of the lower limb, its chronicity, how it differs from primary varicose veins, and the recent investigations and therapies introduced to alleviate it. It is a condition extremely chronic in nature, the diagnosis of which is too often neglected and the treatment misunderstood. As a rule it follows the acute phase of a deep venous thrombosis. A few cases however occur spontaneously, possibly as an inherent weakness of the deep venous valves.<sup>1, 11</sup> This small group suffer usually from mild symptoms without any deep-vein pathology; they commonly complain of aching in the leg with mild oedema towards the end of the day, which is aggravated by prolonged standing and at the menses. The majority of our cases both private and hospital result from a deep venous thrombosis following operation, a medical illness, trauma, or even therapeutic injection of a superficial varicose vein.

It is surprising that these chronic changes in the lower leg, which develop after the acute primary stage of a deep venous thrombosis has subsided, should continue to be

overlooked. This is due to the fact that the condition is confused with similar changes in primary varicose veins in the lower limb. The post-phlebitic syndrome is a separate entity. Secondary varicose veins do arise in the post-phlebitic state, but as a mechanism compensatory to deep venous obstruction.

### INCIDENCE

The incidence of the post-phlebitic syndrome and the disability produced is not generally appreciated. In Sweden Jorpes<sup>2</sup> stated that the disability caused annually by the chronic post-phlebitic state was more severe than the sequelae arising in patients surviving motor-car accidents in Sweden; and Birger<sup>3</sup> who has reported that his study of material from the Swedish Pension Board showed that it was more serious, with a higher incidence rate, than important disease-groups such as tuberculosis of joints or bones and diabetes. In Great Britain Professor Boyd<sup>4</sup> and others stated that there were 5 sufferers from this condition in every 1,000 of the working population. It was estimated that within a radius of 50 miles of Manchester there were probably 50,000 cases of the chronic post-phlebitic state.

\* A paper read at the South African Medical Congress, Johannesburg, September 1952.

In my own small series (private cases) of 165 vascular problems of the lower limb, 55 or 33% showed the typical post-phlebotic syndrome. In South Africa the same conditions exist, but no other figures have been published. There is a large incidence of this syndrome among the Bantu race especially, in whom the primary acute deep venous thrombosis appears to be associated with malnutrition; the secondary chronic stage therefore becomes common.

#### ETIOLOGY AND PATHOLOGY

Deep thrombosis arises in a healthy, often young, individual having no varicose veins, after a delivery or an operation, sometimes spontaneously (fever, lying in bed). Manifest oedema remains in the leg for a varying period, perhaps permanently. Within a year after the thrombosis, or after a varying period up to 10 years, or in isolated cases still longer, an ulcer arises either spontaneously or after a slight trauma. This ulcer may be preceded and later followed by dry or weeping eczematous skin changes.

A description of this chronic stage is inadequate without a brief reference to the acute deep thrombosis. This must be differentiated from the superficial phlebitis in a superficial varicose vein or the migratory type associated with peripheral vascular disease. From statistics, women are more liable to thrombosis; in some clinics the figures are 5 to 1. If one deducts the cases following confinement and gynecological operations there still remains a higher incidence among women. Thrombosis following injuries to the lower extremities, either severe fractures of the femur or contusion of the lower leg, is by no means a rare occurrence. The connexion between the injury and the after-effects is not always evident; there are many fractures and other injuries to the lower extremities where the symptoms are poorly developed or the pressure of the plaster cast masks oedema.

An increased coagulability of the blood has been noted in the hyperadrenal state induced by the therapeutic administration of corticotropin (ACTH) and cortisone. This may persist for as long as 3 weeks after the drug is stopped. It has caused numerous instances of deep thrombotic complications in the lower limbs and elsewhere in the body. Cosgriff<sup>5</sup> has reported 40 such episodes in 28 patients among approximately 200 treated with ACTH and cortisone. Others have reported similar cases since 1950. With the increased use of these agents an increase of these complications may be recorded.

The acute thrombotic process almost always begins in the lower leg, whence it spreads upwards and may halt anywhere from below the knee to the junction of the common iliac veins with the inferior vena cava and even sometimes in this latter vein itself. After the thrombosis in the vein-walls has provoked the reactive process which causes it to adhere to the walls along the whole of its length and which by lymph-blockage and vasospasm may give the typical 'white leg' picture, other reactive processes soon begin, which may be either resolution and absorption, or organization. The most usual process is organization of the thrombus, which may result in a restoration of the lumen. The re-canalized vessel seldom has the same width as the normal one and complete restoration of function does not take place. The thrombus is transformed into hard connective tissue. Parietal thrombi result only in thickening of the intima. Obstructing thrombi often transform the vein into a solid string of scars, but in many cases more or less complete canalization ensues. The lumen of such an organized thrombotic vein does not serve any useful purpose, but rather the reverse, because the valves of the veins are destroyed, thereby losing the power to convey the blood upwards, so that back pressure results in the deep veins.

This all results in disturbed venous and lymphatic circulation giving rise to a permanent protein-rich oedema resulting in fibrosis. After the deep veins become unserviceable (especially if the thrombosis has reached

the popliteal vein or higher) a collateral circulation develops in the subcutaneous vein network, in which the greater and lesser saphenous systems become the principal course for return blood flow. Even if these subcutaneous veins function satisfactorily at first, the task of carrying away the blood becomes gradually too much for them, resulting in chronic stasis, dilatation of the veins (which become tortuous), oedema, and finally induration and ulceration of the lower limb. Leriche<sup>6</sup> considers that the chronic stage of thrombosis results from vascular spasm remaining after the acute stage has passed. Others<sup>7</sup> maintain that vasospasm plays a part only in exceptional cases. According to my own experience vasospasm is less evident in the chronic stage than in the acute phase and that it does not have much influence on the development of the chronic symptoms. The venous insufficiency is in itself the cause of the degenerative changes in the lower leg. The 'vein pump', which is really the movement of the skeletal muscles and the functioning of the vein valves, is necessary for the return flow of blood to the heart against the force of gravity in the upright position. Should the 'vein pump' function unsatisfactorily an accumulation of blood occurs in the leg on standing. There arises a condition of venous stasis accompanied by an appreciably increased vein pressure resulting in oedema. If one considers the end-stage of thrombosis in a deep principal vein as a stiff tube having thick walls of connective tissue and no functioning valves one can easily appreciate the considerable capillary pressure which occurs in the lowest part of the leg when the 'vein pump' is unable to counteract the hydrostatic pressure in the valveless principal vein.

Should the deep principal vein become almost completely obliterated, this increased pressure is not evident here but will locate itself in the superficial main vein system, where it will eventually render the superficial vein valves insufficient. At the end-stage the deep veins may be affected in some places and in other places remain capable of functioning. The blood can then proceed on its way to the heart via the superficial veins and other functioning veins, evading the inefficient sections of the deep veins. In this way a satisfactory collateral circulation may develop. It is important to determine which sections of the deep main veins are destroyed. Should the destruction reach the popliteal vein or higher the prospect of a satisfactory outflow is appreciably less than if the thrombosis had halted below this region. Thus it is important to prevent the thrombosis from reaching the critical knee level by the use of intensive anticoagulants.

The lymphatics are unable to carry away the increased oedematous fluid, especially because of the high vein pressure and the destruction of lymphatics that probably occurred in the acute stage of the thrombosis. In the chronic stage of thrombosis the fundamental causes of the induration, eczema, ulceration and sometimes elephantiasis of the skin are venous stasis and the chronic oedema which arises therefrom (Fig. 1).

#### CLINICAL SIGNS AND SYMPTOMS

The severity of the signs and symptoms vary considerably in the mild case; the discomfort is minimal unless skin lesions develop. In the moderate or more severe case of

chronic venous insufficiency the symptoms of the classical post-phlebotic syndrome become established at varying intervals after the original acute deep venous thrombosis. There is oedema with discomfort worse on standing and at the end of a day's labour, and fatigue on walking. A

spite of a constricting tourniquet is characteristic of deep venous insufficiency.

*Oedema.* The swelling in the post-phlebotic syndrome is either a soft pitting oedema which improves or disappears after a night's rest in bed, or a hard lymphatic type of

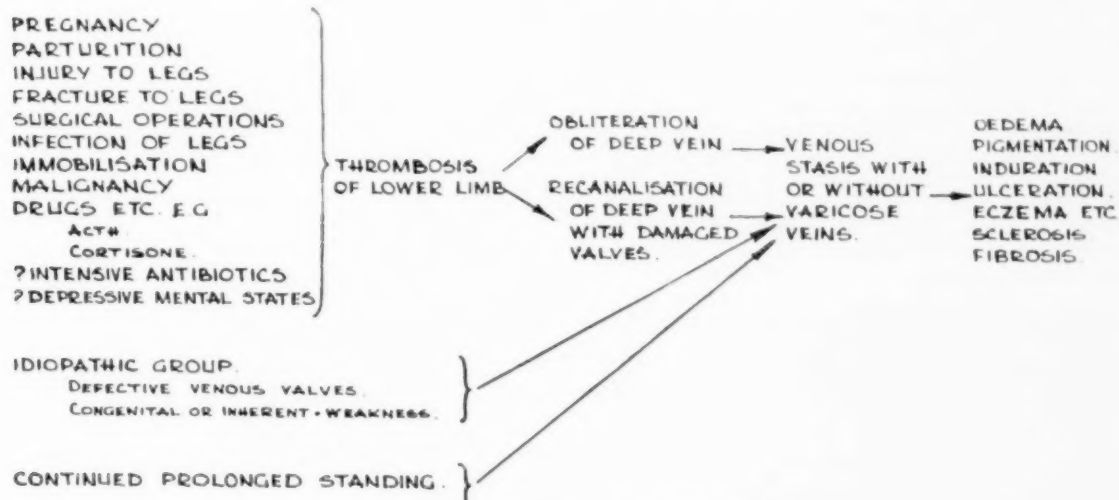


Fig. 1. Causes of Venous Stasis in Lower Limb.

tough, brawny indurated and pigmented skin of the lower leg, susceptible to painful cellulitis, eczematoid lesions, and intractable ulcers, is found on examination. Nocturnal cramps and cramps associated with stretching in bed at rest, are quite common. This condition differs from primary incompetent superficial varicose veins in many respects. With the superficial varicosities the swelling is less, the pain is generally less and the muscular cramps associated with the deep type are not, as a rule, present. The associated ulcers are malleolar in position usually on the inner aspect of the ankle, whereas ulcers of the chronic deep insufficiency occur at the ankle and at higher levels. Both types, however, are gravitational in position. The symptoms and signs are analysed in more detail below.

*Pain.* There are in this syndrome 3 types of pain. The first is a causalgic type and seen in conjunction with a cold clammy vasospastic extremity. It is usually diffuse and aggravated by nervous tension and emotions. In our experience this pain is infrequent in the truly established post-phlebotic syndrome and occurs in about 2% of cases. It is, however, seen occasionally in the patient convalescing from the acute phase who has had inadequate anticoagulant therapy.

The second type of pain courses along the femoral and saphenous veins and is very often segmental in character. This also is infrequent.

The third type is the commonest. It is the 'bursting' type of pain which is especially complained of on prolonged standing. It is often improved by walking or muscular contractions. It subsides gradually when the patient assumes the horizontal position or on elevation of the limb. Such pain together with swelling of a bunch of tortuous dilated veins that fill up suddenly in the erect position in

swelling which is more persistent. The second is the result of a disturbed venous and lymphatic circulation already discussed, giving rise to a permanent protein-rich oedema resulting in fibrosis.

*Induration.* These hard patches, often pigmented, are mostly seen above the inner ankle and sometimes on the posterior surface of the calf. They are the site of recurrent painful cellulitis and consist of plasma clots, granulomatous inflammatory reactions and fat necrosis. They may spread centrally as far as the level of the knee. Their centre often breaks down and forms a typical post-phlebotic ulcer, which heals slowly and is apt to recur, resulting in prolonged and painful disability.

*Ulceration.* There are 2 types of varicose ulceration, the one due to incompetence of the superficial venous system and the other to an incompetence of the superficial, deep and communicating veins. The superficial type, commonly known as the varicose ulcer, is comparatively simple to handle by a proper eradication of the incompetent superficial varicosities, whereas the ulcer due to deep vein incompetency is by no means so easy to manage and it is well known for its extreme chronicity and recurrence. It is for this painful condition that numerous forms of conservative and surgical treatments have been advocated. Proper supportive bandaging, skin grafts, fasciotomies and the more radical sympathectomy operation are all in vogue. These post-phlebotic ulcers are characteristic in appearance, usually small but not infrequently large with surrounding cellulitis and solid oedema. The adjacent skin is deeply pigmented and often eczematous or dry with a flaking dermatitis. This type of lesion is referred to as the 'gravitational ulcer' because of the etiological association with the erect posture.

**Muscular Cramps and Parasthesias.** This is not an infrequent complaint of the post-phlebotic sufferer. It occurs commonly at night, and often wakes the patient. It also appears when the patient, on lying, puts his limbs on the stretch. In some cases it is a troublesome symptom. Parasthesias or 'pins and needles' are a fairly common sign especially when the legs are crossed or maintained in one position for any length of time.

#### SPECIAL INVESTIGATIONS AND EXAMINATIONS

A clinical examination of both lower limbs should if possible be carried out at the end of a day's work or standing. It is then that the amount of oedema is best noted. One can usually diagnose clinically that the patient is suffering from either superficial primary varicose veins or the post-phlebotic syndrome. There are however certain investigations that are of value in assessing diagnosis, treatment and follow-up.

**Venous Pressures.** The measurement of venous pressures of the lower limb in different positions and with exercise is an extremely valuable investigation and within the scope of any surgical intern. It can be estimated by the phlebomanometer or by an easily constructed home-made apparatus (Fig. 2). In our Surgical Unit we have with this



Fig. 2. Superficial Venous Pressure Apparatus.

latter method measured the pressure-changes in normal limbs, in superficial varicosities and in legs with post-phlebotic changes, at rest, in the erect position, and after muscular activity. This investigation produces definite and constant findings. Our results obtained in European and non-European material correspond with those published by Walker.<sup>8</sup>

At rest the venous pressure in a limb in the standing position corresponds to a column of blood extending vertically from the heart level to the level of the point of measurement. This varies from 60 to 90 mm Hg. The average pressures obtained in our clinical material is summarized in Table I.

From these data it is reasonable to assume that the fall of venous pressure with exercise is proportional to the efficiency of the venous return, or, in other words, the unobstructed return effected by the 'venous pump' of the leg. In established chronic venous insufficiency the pres-

TABLE I: VENOUS PRESSURES IN FOOT IN ERECT POSITION—AT REST, AND WITH MUSCULAR CONTRACTION

			mm. Hg
Standing still	—all cases	..	60-90
After muscular exercises*	—normal	..	0-25
"	—primary varicose veins	..	30-80
"	—varicose veins with light		
"	tourniquet below knee	..	0-30
"	—deep venous disease	..	40-100
"	—deep venous disease with		
"	light tourniquet below		
"	knee	..	45-110

\* Obtained by 'pump action' of the heel on the ground.

sure remains high with exercise and in some cases rises. If the fall in pressure is an appreciable one then one can assume that the collateral venous return is competent. These figures have an important bearing on the value of ligation of the deep venous channel in the post-phlebotic syndrome. It will be pointed out later that the cases which derive most benefit are those showing a significant fall in the venous pressure.

**Phlebography.** X-ray visualization of the venous system of a limb is an investigation applicable to the superficial and deep systems. Over the past years various techniques have been described. Phlebography by the distal ascending technique was first practised and described by Dos Santos.<sup>9</sup> The technique is simple. A light tourniquet is placed just above the ankle to occlude the superficial venous system, and a suitable dye is injected into a foot vein with the patient supine. The value of ascending phlebography is controversial. Another technique by retrograde visualization of the deep venous system has been enthusiastically described by Bauer<sup>1</sup> for the acute and chronic phases of deep venous thrombosis. He attaches great importance to this investigation, although Allen, Linton and Donaldson<sup>10</sup> do not share this opinion, stating that approximately 30% of acute deep thrombosis can be missed by this X-ray investigation. We agree with this opinion and hold that the acute deep thrombosis can be diagnosed on clinical grounds alone and that phlebography is an unnecessary investigation. The technique of retrograde phlebography is not as simple as the ascending method. Its main purpose is to investigate the functional state of the valves of the deep vascular system. Luke<sup>11</sup> in 1941 first used retrograde phlebography by injecting a dye into the proximal upper end of the femoral vein. This technique in our hands requires the exposure of the femoral vein. Luke pointed out that in normal conditions the first distal valve arrests the radio-opaque substance very near to the level of the injection. Bauer<sup>1</sup> described a similar method with improved modifications. We have carried out this investigation on numerous cases in our Surgical Unit at Edenvale Hospital. Although the results obtained are helpful we are by no means satisfied that incompetency of valves can be satisfactorily proved by this technique.

In order to appreciate the clinical application of retrograde phlebography the number and site of the deep venous valves must be considered. Powell and Lynn<sup>12</sup> after dissecting the venous systems of 27 cadavers have concluded that great variations exist in different subjects and between the different limbs of the same subject. I have also found great variation in dissection of cadavers but it is possible to describe a pattern for practical classification:

In the external iliac vein valves are present in 33%—usually 1 valve only, occasionally 2.

In the common femoral vein valves are present in 72%—1 valve only.

In the superficial femoral vein valves are present in 100%—1 to 4 valves.

In the upper two-thirds of the popliteal vein valves are present in 96%—1 valve only, which lies above the knee joint.

In our series of retrograde phlebograms carried out on 50 limbs it was noted that the results conformed to 4 patterns:



1. The dye is held up at the first competent valve, usually situated a short distance distal to the lesser trochanter of the femur. The dye appears to be effectively held up and does not progress distally. This picture presented in a number of normal limbs which were investigated for comparative purposes (Fig. 3).

2. The dye is held up partially, but a fainter shadow is seen trickling through to the next valve, or even progressing more distally as far as the mid-calf. This state was found in the completely normal group and in the group clinically diagnosed as post-phlebitic (Fig. 4).

3. The dye communicated via a very large number of collateral and perforator veins (many of which appear varicose) with the skin and subcutaneous veins, especially in the upper part of the thigh. In this group the dye may or may not be held up at a high proximal valve. This picture was seen in the normal group, in primary varicose veins and in the post-phlebitic state (Fig. 5).

4. The dye is not held up at all and is shown as a dense shadow all down the thigh and into the leg. As a rule some valvular cusps are visualized along the main branch or its satellites. This is presumed to be the incompetent rigid tube that results from a deep venous thrombosis (Fig. 6).

therefore is that the deep valvular system is not perfect in function like the locks in a canal, and that some retrograde flow should be regarded as a normal phenomenon.

We decided on these findings to attempt to correlate the deep venous pressures with retrograde deep venous phlebograms and the superficial venous pressures. For this investigation the popliteal vein pressure was chosen in our cases that went to operation. If a state of venous hypertension exists with incompetent deep veins the measurement of the popliteal vein in the erect and horizontal positions should provide useful information especially if one predetermines the superficial vein pressure (described above). These popliteal pressures were obtained with an ordinary glass spinal manometer. The blood column itself was estimated. A series of normal readings were obtained in the superficial primary varicose vein operation when we exposed the lesser saphenous. In another series readings were obtained in those post-phlebitic cases that were subjected to popliteal ligation.

The readings were taken with the patient horizontal and with the operating table tilted as far vertically as possible. A number of these results are recorded in Table II.

From these figures it is obvious that this investigation is of no value; we have therefore discontinued using it. This



Fig. 3. Retrograde Deep-Vein Phlebogram illustrating hold-up of dye at first competent valve.

Fig. 4. Retrograde Deep-Vein Phlebogram showing hold-up of dye at a proximal valve but fainter outline of dye visualized progressing distally.

Fig. 5. Retrograde Deep-Vein Phlebogram showing hold-up of dye but communicating with numerous collateral and superficial veins.

Fig. 6. Retrograde Deep-Vein Phlebogram showing no hold-up of dye. This illustrates completely incompetent deep venous valves.

From the phlebographic results obtained in this series we found it difficult to diagnose by retrograde phlebography alone whether or not the deep venous valves were competent. In the normal limb some dye certainly does progress beyond the first valve. In the normal vein the pressure of the injected dye may be sufficient to open the valvular cusps to allow some of the dye to escape beyond it. It can be argued that as the dye is injected blood is still returning to the heart and for this reason there can never be a state where venous valves are completely and effectively closed.

We are satisfied that the retrograde phlebogram does not provide conclusive evidence of the functional state of the valves of the deep venous channels. Radiologically the competency of the valves varies greatly from person to person. Presumably normal veins vary greatly in function, allowing blood to flow in a retrograde direction. The assumption

TABLE II: POPLITEAL VEIN PRESSURES IN DIFFERENT POSITIONS

		Horizontal mm. of Blood	Tilted mm. of Blood
Case I.	Deep venous thrombosis	270	410
Case II.	" " " "	100	400
Case III.	" " " "	60	420
Case IV.	Varicose veins, primary, without clinical evidence of deep venous thrombosis	140	495
Case V.	" " " "	70	400
Case VI.	" " " "	115	550

was disappointing because we had hoped that it would be of similar value to the superficial venous pressures, or even greater, and that it would possibly throw some light on the inconclusive evidence afforded by the retrograde phlebograms.

If retrograde phlebography does possess the virtue of revealing the functional state of the deep venous valves it has the disadvantage that it involves the exposure of the femoral vein. We felt that some type of phlebography should be used which is simpler to perform and which may provide more detailed information concerning the venous valves together with visualization of the deep venous channel soon after the muscular action of the 'venous pump'. To achieve this it was decided to approach phlebography via the short saphenous vein behind the knee, before it enters the popliteal vein. In addition to the simplicity of the technique it allows a much more detailed exploration of the venous system of the leg, a factor of some importance when one considers that the major symptoms and signs are encountered at this level. This lesser saphenous route is easily approached through a short transverse incision below the popliteal fold where the lesser saphenous is exposed. A small-bore rubber catheter or plastic tube (polythene) is inserted into a small incision of the vein and for a short distance into the beginning of the popliteal-femoral junction. Once the vein is canalized the dye is injected with the patient erect and X-rays are taken. The first X-ray is taken with the limb at rest. This usually visualizes the lower femoral vein, and also the functional activity of the valves of this area. Normally the dye is held up below the knee (Fig. 7a). The whole of the femoral vein can be visualized if X-rays are taken more proximally (Fig. 7b). If this column of dye progresses more distally then one can only suspect venous insufficiency. The second series of X-rays are then taken after the patient is instructed to perform a pumping action of the heel on to the standing platform. This action is continued for about 20 times. X-ray immedi-

ately thereafter shows an interesting picture. The dye in the normal limb or in the limb with an efficient collateral return is almost completely dispersed, except for some dye left behind in the valvular cusps (Fig. 8). If further X-rays are taken at a higher level in the thigh soon after these muscular contractions of the lower limb, the dye in an efficient limb will also be seen to disperse (Fig. 9).

This technique has the advantage of visualizing the deep venous system and of estimating the efficiency of the venous pump action of the lower limb. It combines the retrograde phlebography (of Bauer) with visualization of what happens to the column of venous blood with muscular contraction of the limb in the erect position.

#### PROPHYLAXIS OF THE POST-PHLEBITIC SYNDROME

It is outside the scope of this paper to describe acute thrombo-embolic disease, but certain facts must be borne in mind in considering the prophylaxis of the post-phlebitic syndrome. The etiology of deep venous thrombosis is still unknown. Increased coagulation time and increased platelet-count are merely associated with the increased clotting tendency in the blood. It was formerly considered that prolonged immobility of a patient, predisposing to a sluggish and stagnant blood-flow, was a potent factor. Although the incidence of thrombo-embolic disease has been considerably reduced by early post-operative ambulation and medical gymnastics, it still occurs with high mortality. Leithauser *et al.*<sup>13</sup> makes it clear that this therapy must be carried out in a definite standardized and energetic manner, vigorously and properly employed. The



Fig. 7a. Phlebogram via Lesser Saphenous technique in the erect position, showing hold-up of dye and competency of deep vein below knee. Note outline of valvular cusps.

Fig. 7b. Same subject as Fig. 7a showing more proximal X-rays outlining Deep Femoral Vein in the erect position, again with Lesser Saphenous technique.

Fig. 8. Phlebogram via Lesser Saphenous technique taken immediately after 20 muscular contractions of leg muscles. This illustrates complete dispersal of dye except for some outlining of valvular cusps.

Fig. 9. Same subject as in Fig. 8 showing more proximal X-rays, again illustrating complete dispersal of dye from Deep Femoral Vein after muscular contractions of leg.

figures of the large Scandinavian clinics<sup>14</sup> show that 1 in 176 (0.6%) patients still develop thrombo-embolic complications. Early post-operative ambulation however has not eliminated thrombo-embolic phenomena completely. Deep venous thrombosis appears to be clinically on the increase and although early ambulation has decreased the mortality rates an overall increase is noted in many clinics.<sup>15, 16</sup>

As regards mortality, thrombosis has remained at its original level and is likely to remain at that level as long as regular therapy with anticoagulants is not applied.

The introduction of anticoagulant therapy in thrombo-embolic disease has been a great advance both in reducing mortality and reducing the incidence of the post-phlebitic syndrome. Until recently there have been 2 schools of treatment, viz. femoral or inferior vena cava ligation, and the more conservative use of the anticoagulants. In our hands the proper use of anticoagulants has practically abolished the necessity for deep vein ligation in the great majority of cases. Experience in the management of thrombo-embolic disease during the past 10 years indicates that the use of the anticoagulants is the treatment of choice. Deep venous interruption is indicated, however, when anticoagulants are contra-indicated; also in some cases of septic thrombo-phlebitis and possibly in spreading saphenous-vein thrombosis. To protect an amputee from embolism, ligation of the common femoral vein on the side of the amputation can be performed and additional ligation of the superficial femoral on the opposite side. There are also indications for the combined use of venous ligation and anticoagulants. When anticoagulant therapy is indicated it must be properly carried out. Our own experience is based on private surgical practice and a busy surgical unit where all types of general and traumatic surgery are performed. Heparin is the anticoagulant of choice. The dramatic sudden relief of pain in a limb, the diminution of the oedema and the general well-being of the patient are striking. Apart from saving life, heparin reduces the other complications of deep venous thrombosis, especially swelling, pain and the post-phlebitic ulcers and other skin lesions. This lowering of the incidence of the post-phlebitic state is a great advance. One must again stress, however, that if the anticoagulants are to produce the best results they must be used properly. Heparin must be used in the early acute case because it acts immediately when injected intravenously, reaching its maximum effect in 2 to 3 hours and then the body begins to destroy it. It is non-toxic, its action is certain and it does not require complicated laboratory tests to control its action. A simple bedside coagulation test is all that is required. The coagulation time should be increased to at least twice or three times the normal. If bleeding does occur with heparin there is an instant and certain antidote in protamine sulphate. Heparin is used intravenously, subcutaneously or intramuscularly, but we firmly believe that the intravenous is the only efficient method. It can be administered by the continuous method in the acute stage or by repeated intravenous injections by means of the indwelling Olovson needle.<sup>17</sup> Jorpes<sup>18</sup> has recently indicated that the subcutaneous and intramuscular methods are less satisfactory and that the intravenous route is the method of choice. Anticoagulant therapy must be continued for at least 8 or 10 weeks after all pain has sub-

sided. For this prolonged period Dicumarol or Tromexan may be employed, with proper laboratory control. It has been our experience that very many of these cases are given an insufficient course of the Coumarin derivatives and that this leads to complications. Good, efficient supportive bandaging or stockings must also be worn in the convalescent phases for as long as oedema exists and these supports must be used during the time that the patient is up and about; that is, from getting up until bedtime. Sleeping with the foot of the bed raised is helpful, and activity of the muscles is better than prolonged standing.

These measures have reduced the incidence of the post-phlebitic complication. There are still however many patients with the established post-phlebitic syndrome, and for these efforts are now being made to treat them conservatively or by a more radical surgical approach.

#### TREATMENT OF ESTABLISHED POST-PHLEBITIC SYNDROME

At present there are many treatments in vogue. Because the pathological process that causes a deep venous thrombosis is not unanimously accepted, the therapies vary. Some believe that the venous valves become incompetent, thereby causing a venous hypertension resulting in the troublesome signs and symptoms. Others maintain that the valves do not become so grossly incompetent that venous hypertension results. We feel that the signs and symptoms recur or are aggravated so regularly with the erect posture that we cannot escape the theory of increased venous hypertension. Superficial venous pressures provide constant readings to confirm this point of view, and more recently we have been able to demonstrate stagnation in the deep venous channels by phlebography.

Prophylaxis plays a prominent rôle. The proper treatment of the original deep venous thrombosis is important. With the introduction of anticoagulant therapy more and more cases should be relieved of these complications completely or almost completely.

Not all patients present with the same signs and symptoms. Some come with oedema only, others complain of pain, of a bursting character, with or without ulcers in the dependent parts of the lower limbs. Ulcers are often associated with eczematoid conditions of the skin surrounding them. Indurated cellulitis is also an intractable skin lesion. Secondary or compensating varicose veins almost invariably manifest themselves sooner or later in a mild or severe degree.

*Oedema Only.* Very often oedema is the only manifestation of chronic venous insufficiency. Whether the case is an early post-phlebitic one or one of long standing, the patient should be put to bed for 24 to 48 hours with the legs elevated until all swelling has disappeared. The patient is then equipped with an adequate elastic support. Many types of elastic bandages are being used with success. In South Africa with our warm climate we find that a good type of two-way stretch elastic or nylon stocking has proved very beneficial. It may be necessary for the patient to wear the support for the rest of his life. We also supply a directive pamphlet on the care of the swelling and care of the feet:

\*Wear your elastic stocking from the time you get out of bed until you retire, with the exception of bath time. The stocking should be renewed every 3 months, and it is best



to have 2 stockings that can be alternated for cleaning purposes.

\*Do not stand for more than 30 minutes without sitting down for 15 minutes and elevating the leg on another chair. When standing get into the habit of flexing the toes in your shoes and frequently rising on tip toes.

\*Plan your day so that you can lie down for 2 to 3 half-hour periods and elevate your leg to a 45° angle; the back of a small straight-backed chair is useful for this purpose.

\*Whenever you sit down, elevate your leg on a footstool, chair or chesterfield.

\*At night raise the foot of the bed on blocks about 9 inches. Apply a bland cold cream to the affected skin at night about every second day.

\*Avoid irritation to the involved leg, especially in respect to sunburn and hot water bottles.

\*Be extremely careful to prevent bumping or scratching the affected leg.

\*You are advised to refrain from smoking completely, especially when under treatment for recurrence of your condition.

\*Keep your weight down to the average for your age and height; this is very necessary.\*

Recently a new type of compression has been evolved in the U.S.A. based on pulsatile air-pressure and called the 'aeropulse' legging. Regulated air pressure to a leg is obtained by the contraction of a legging made of inelastic material (canvas) containing an inflatable rubber bladder, which is pumped up after the legging is put on. Then not only is a controlled and uniform pressure applied to the skin throughout the extent of the rubber bladder, but also when the patient walks there is a rhythmical rise in the pressure with each contraction of the muscles. In essence a substitute for the deep fascia has been placed outside the skin and subcutaneous tissues and the powerful pumping action of muscular contractions compressing the veins and pushing the blood upward against gravity is applied by this means to the superficial veins throughout the lower part of the leg.

*Oedema and Varicose Veins.* Varicose veins in chronic venous insufficiency are usually secondary. These veins should be adequately dealt with by a radical high ligation and phlebectomy (stripping) and eradication of incompetent perforators. It is often maintained that by so doing one removes the main and only source of venous return. This is really not so, because these superficial veins are already varicose themselves with incompetent valvular function especially in the erect position. As such they serve no real physiological purpose but rather add to the already existing venous insufficiency. They should therefore be adequately removed. Operation on the superficial veins in our post-phlebotic cases does not reduce oedema to any real extent, so that elastic support should still be worn after the operation.

*Ulceration and Eczema.* The most satisfactory treatment of ulcers is to put the patient to bed with the limbs elevated and reduce the swelling as soon as possible. Locally many treatments can be applied but the basic principle of bedrest must not be forgotten. Antibiotic therapy is a very useful adjunct but not as a measure on its own. If ulcers are large, skin grafts and fasciotomies can be applied. There are many other treatments described and in use, but it is not the intention to describe them all. Unna's Paste boot or cast is an old treatment for use on the ambulatory patient once the ulcer is showing signs of healthy granulation tissue. It is successful if applied at the proper time and in a proper manner. If veins are present,

especially 'feeder' veins leading from the ulcer, then these should be dealt with as already described. After ulcers have healed it is advisable for patients to wear adequate supportive bandages or stocking. It may be necessary for them to wear them for the rest of their lives, especially if they have to stand for any length of time at their occupations. Ulceration recurs if proper care is not taken. It is a simpler matter to heal an ulcer than to prevent it from recurring. It is the high recurrence rate that has led to the more radical measures of treatment. Interruption of the sympathetic pathways to the affected limb, i.e. lumbar sympathectomy, is described as a satisfactory form of treatment. Ulcers are stated to heal and pain to disappear, especially in the cold erythrocyanoid limb.<sup>19</sup> Our experience is that the post-phlebotic leg is almost always a warm one and that the pain is caused by a mechanical hypertension and is not a true causalgic pain. It may seem possible that vasospasm is a factor, but on the other hand certain cases may be made worse by sympathectomy resulting indirectly in overdilation of the veins. Our experience with sympathectomies for this condition, although limited, has shown that they are of no real value. There appears to be no true physiological basis for such treatment. With all measures, as long as oedema exists, elastic compression must be maintained, otherwise symptoms and signs are bound to recur.

*Indurated Cellulitis.* This is often a stubborn and difficult condition to treat, for it is usually of considerable duration. The best results are obtained from bed rest with the limb elevated. The acute cellulitis can be controlled by antibiotic therapy. When this is controlled supportive elastic bandaging or stockings are essential. When the chronic indurated areas show nutritional changes and fail to respond to conservative measures then excision and skin grafting should be considered.

*Pain.* This symptom has already been referred to. It is often very distressing. Conservative support of the limb very often helps to alleviate it. The pain is proportional to the extent of the swelling and if this can be controlled then pain usually improves. In our experience the pain often persists after the treatment of an acute deep venous thrombosis and in these early post-phlebotic cases we have utilized a further extended course of anticoagulant therapy for 2 to 3 months. This has proved immensely valuable in alleviating the pain.

#### SURGICAL LIGATION OF THE DEEP VENOUS SYSTEM

More recently this more radical treatment of the post-phlebotic syndrome especially for ulceration and pain, has been introduced by Bauer,<sup>1</sup> Linton<sup>20</sup> and others. Bauer introduced the popliteal ligation, whereas Linton and others advocate ligation of the superficial femoral veins. The rationale for this treatment is that the original acute deep venous thrombosis causes incompetency of the venous valves; this allows some blood to return through partially canalized thrombi, which interferes with the establishment of a sufficient number of efficient collateral venous channels. Ligation of a deep venous channel either at the popliteal level or in the groin at the superficial femoral vein will completely prevent this reduced trickle of venous return, thereby allowing the collaterals to establish themselves and aid the return flow of venous blood.

This treatment appears to be logical on first impressions. To-day, however, after a few years many investigators do not record the good results Bauer obtained. The only indication for this surgical ligation was a retrograde phlebogram showing reflux of the dye and thus indicating incompetency

of venous valvular function. Bauer preferred to ligate the popliteal vein because venous communications from the profunda vein to the popliteal might open up the latter if this was ligated high. We have been able to visualize these venous communications in some of our retrograde phlebograms. Also on phlebographic studies taken 1½ to 3 minutes after the injection, stasis is visualized in the main venous channel, indicating high venous pressure in the popliteal vein. Ligation of the popliteal vein would relieve this. Pronounced stasis phenomena seldom occur in the thigh, owing to the good collaterals existing there because of abundant muscular veins. The leg, however, has much poorer opportunities in this respect because the blood-return must pass through a bottle-neck at the level of the knee joint via the popliteal and long saphenous veins. If the popliteal is ligated blood is forced through the saphenous, if it still exists, and through the capsular (articular) veins, into the thigh and once in the thigh return flow is adequately taken care of.

In addition to ligation of the deep vein Bauer also advocates eradication of the superficial veins if they are varicose. He claims very satisfactory results with his treatment—84% out of 196 cases showing cure of ulceration and freedom from symptoms and signs of venous stasis 6 months to 3 years after operation.<sup>21</sup> De Takats<sup>22</sup> in a smaller series (10 cases—12 extremities) indicates that he has had fairly favourable results with the bursting pain and ulceration but that the oedema is not so favourably relieved. He also indicates that the cases should be selected by investigations apart from the retrograde phlebogram. Although venous pressures are not absolutely necessary he claims that the cases which benefit clinically are those which exhibit collapse of superficial veins after 10 rapid flexions and extensions of the knee in spite of a tourniquet and which rapidly refill on cessation of exercise while the tourniquet is still in place. This does in fact take into consideration superficial venous pressures. He adds a note of warning that in the unselected case popliteal ligation can do more harm than good.

In our series of 45 popliteal ligations (performed in hospital and private practice) our only investigation originally was a retrograde phlebogram. We never operated on any limb without a previous history of deep venous thrombosis, or without swelling. Fifteen of the 45 were Bantus in whom a definite history of a previous deep venous thrombosis was sometimes difficult to obtain. Our results are summarized briefly:

*Ulceration and Eczema.* Twenty-seven cases showed signs of healing during 1 to 4 years of follow-up. (It was extremely difficult to obtain a true follow-up in the Bantu cases). The rest had recurrences.

*Bursting Pain.* Improvement of this symptom was noted in 31 cases, in spite of the persistence of oedema.

*Oedema* was not improved as a rule. In 4 cases it was made worse. Any improvement that did result was possibly due to the efficient supportive bandaging and elastic stockings that were used.

*Nocturnal Cramp.* This symptom only occurred in 6 of this series and improvement was noted in 3 of them.

We felt that this series of cases although comparatively small in number indicated some defects in our approach to the subject. Our retrograde phlebograms indicated that this was not an infallible investigation on its own to warrant popliteal ligation. Venous pressures were measured in a fresh series of post-phlebotic cases and also in those who had had a popliteal ligation performed. In some cases the superficial venous pressures remained stationary or even rose with muscular activity, while in others the venous pressure decreased with muscular activity but not to the same extent as in normal limbs or limbs with primary varicose veins. In the post-popliteal ligation cases we found an actual increase in superficial venous pressures

with muscular activity in all our follow-up failures; in other words, popliteal ligation had been followed by an increase of venous hypertension.

This led us to believe that the superficial venous pressure is an important investigation in assessing post-phlebotic cases for popliteal or deep venous ligation. As we were also not satisfied with the results obtained by retrograde phlebography we devised a method of visualizing the deep venous channels and their valves by the lesser saphenous phlebography, together with a measurement of venous return function with muscular activity. In a small series of 15 cases so far treated, this method has proved of great value in assessing which cases will probably improve clinically with deep vein ligation. It gives two-fold information, viz. as to the competency of the deep vein and the functional state of the venous return after muscular activity.

#### PRESENT STATUS OF TREATMENT OF THE POST-PHLEBOTIC SYNDROME

There appears to be a unanimous feeling that the prophylaxis of the acute deep venous thrombosis with early post-operative ambulation and a regular régime of active muscular activity is essential in reducing the alarming number of cases with the post-phlebotic syndrome. The intensive use of the anticoagulants is also vital in preventing the syndrome in established acute deep venous thrombosis.

For the mild chronic case, supportive elastic bandaging properly carried out, or a modification of this principle such as the aero-pulse legging, is essential in controlling the oedema and its associated symptoms and signs.

The more advanced case with severe ulceration and possibly extensive secondary superficial varicose veins, requires more intensive investigations. It is our practice to carry out the following régime before deciding on more active therapy:

The patient is put to bed with the limb or limbs elevated for 24 to 48 hours, and the oedema is watched. Usually after this period it has completely or almost completely subsided. Superficial venous pressures are measured and noted especially if they remain stationary or show a rise with muscular activity.

With the aid of these investigations we finally decide whether one should continue with conservative measures or advise surgical ligation of a deep venous channel.

In all cases of secondary varicose veins, without regard to venous pressures or phlebography, we carry out a radical procedure for these superficial varicosities. We perform a high ligation and phlebectomy (stripping) operation on both the long and lesser saphenous veins in order to eradicate all possible incompetent perforators. This together with the supportive measures is often sufficient to alleviate the signs and symptoms. If however recurrences occur then a decision to ligate the deep vein, preferably at the popliteal region, depends on the venous pressures and lesser saphenous phlebography.

Not all patients who exhibit the post-phlebotic syndrome are suitable for popliteal ligation, a procedure which should not be practised indiscriminately if the best results are to be obtained.

We regard this operation as indicated in:

1. Cases in which the main vein has recanalized. This can be determined by an ascending phlebogram, or phlebography of the popliteal vein by the lesser saphenous technique.
2. Cases in which venous function has not returned completely to normal. These cases will not show normal venous pressure, especially with muscular activity.
3. Cases that do not show maximal valvular incompetence. In these exercise will produce a definite fall in venous pressure from the normal resting level.

If these indications are not fulfilled then ligation of the popliteal vein will probably aggravate the oedema and increase the venous hypertension. Some degree of satisfactory venous valvular function must be present before this surgical procedure is advised. If the investigations are favourable for a popliteal ligation and if the superficial varicosities have not been tackled surgically then we do not hesitate to perform both operations (at different times).

Since we have adopted this line of attack on the post-phlebotic syndrome we have performed only 8 popliteal ligations which conform to our indications. It is still too early to report any proper follow-up. Popliteal ligation is still an experimental procedure and we hope to report many more selected cases on the above criteria before coming to any final conclusions.

The most consistently good results that we have obtained have been with the bursting character of the pain, the painful ulcers and skin lesions and the muscular cramps. The results in treating oedema have been less satisfactory.

#### SUMMARY

The incidence, etiology, pathology, and signs and symptoms of the post-phlebotic syndrome are described.

The special investigations now in vogue provide some pertinent information concerning the pathology and treatment. Of these retrograde phlebography in our hands is no sure means of estimating a true deep vein incompetence. A newer type of phlebography—via the lesser saphenous vein in the popliteal space—has proved most valuable, especially as regards valvular function and venous return.

Superficial venous pressures are very useful in providing information regarding the degree of venous hypertension in the erect posture and especially after muscular activity of the lower limb. This is an efficient test carried out very simply. Popliteal vein pressures in our hands have proved valueless.

Proper prophylactic measures have reduced the incidence

of post-operative and post-decubitus acute venous thrombosis, but the incidence of the acute thrombosis itself is on the increase. Various factors are presented to account for this.

Intensive anticoagulant therapy is our most potent weapon in preventing the crippling effects of the post-phlebotic syndrome. Conservative treatment aimed at reducing oedema by various efficient methods is still a mainstay in the treatment of these post-phlebotic legs.

More recently the surgical approach of ligation of the popliteal or superficial femoral veins has been used rather extensively. The results of this operation vary in different hands and the indications for it are diminishing. It can in some cases do harm and should not be performed indiscriminately.

My sincere thanks are due to Dr. L. Feitelberg, Superintendent of Edendale Hospital, for permission to publish hospital clinical material; to Dr. M. Fainsinger (Radiologist) and his staff of Radiographers for their kind help and co-operation in obtaining these phlebographic records; to my Surgical Registrars and Interns for their help; and to Dr. H. B. Stein for his valuable assistance with this paper.

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#### ANNOTATION

##### YAWS IN SOUTH AFRICA

In a recent monograph issued by WHO on the control of yaws, reviewed in this number of the *Journal* (p. 678), reference is made to two outbreaks of this disease on the Rand mines in 1931 and 1942.

The outbreak in 1931 was reported by Scott,<sup>2</sup> and affected some 338 Africans in the Turf Shaft, Robinson Deep Mine, Johannesburg. Scott considered that transmission was by close bodily contact, most probably in the elevator cages.

The second outbreak, in 1942, reported by H. H. Wright,<sup>1</sup> occurred in the Springs Mines, Witwatersrand, and concerned 67 Africans and 3 Europeans. Transmission in the Africans appeared to be by direct skin contact and infection of minor skin lesions. These were thought to occur when drilling and

in the skips. It was thought that the Europeans were infected in the skips, for there they were in close contact with the Africans. Other isolated cases have been reported on the Rand.

Treatment of the infectious cases, examination of contacts, and improvement in the working conditions, effectively dealt with the outbreaks. It is of interest to note these two outbreaks, for yaws is rare in the Union of South Africa.

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## ASSOCIATION NEWS : VERENIGINGSNUUS

## RAILWAY MEDICAL OFFICERS' GROUP

## ANNUAL REPORT OF THE HON. SECRETARY-TREASURER for the 11 months ended September 1952

Mr. Chairman and Gentlemen: I have pleasure in presenting to you the Secretary's Annual Report.

As you know, the R.M.O. Group restarted negotiations with the Central Sick Fund Board subsequent to our last Annual General Meeting at Durban.

## REPRESENTATIONS OF R.M.O. GROUP

On 30 January 1952 representatives of the Group met a deputation representing the S.A.R. Management to discuss the Group's request for W.C.A. payment rates for attending to Railway employees injured on duty. The Group's request was declined, on the grounds that R.M.O.'s had signed contracts to attend L.O.D. cases as part of their duties, and the management could not see why they now wanted extra remuneration for this part of their work. This request was first discussed 6 years ago. Sound reasons have been put forward for W.C.A. payment, but unfortunately, these have been of no avail.

A meeting of the R.M.O. Ex. Co. with the Central Board Ex. Co. was arranged and was held on 8 November 1951. The previous evening the R.M.O. Ex. Co. held a caucus meeting, where the requests of the Group were thoroughly discussed and a plan of representation decided on. Next day your Ex. Co. received a sympathetic hearing from the Sick Fund, where the Group's requests were discussed in detail. The representations were well and ably put to the Sick Fund. After a lengthy meeting the Central Board Ex. Co. promised to investigate and consider our requests. A Central Board Sub-Committee was subsequently appointed on 14 March 1952 to draw up a report and recommendations re our requests for consideration by the Board's Ex. Co. The report was submitted at the meeting held on 17 June. After several postponements the report was finally considered at a special meeting held on 2 July 1952, where the Central Board Ex. Co. made the following decisions:

1. That the capitation rate applicable to Railway Medical Officers be increased to 18s. per beneficiary per annum.

Decided:

(a) That in respect of portion of the increased cost of maintaining suitable consulting rooms, an increase of 1s. 6d. per beneficiary per annum be granted to a Railway Medical Officer who provides wholly at his own cost an officially-recognized consulting room in his medical district—the foregoing increase not to be granted Railway Medical Officers on line sections with less than 100 members.

(b) That allowances at present paid to Railway Medical Officers in respect of part-rental of surgeries and/or consulting rooms, portion of salaries or wages of receptionists and/or native cleaners, etc., be withdrawn concurrently with the increase in capitation rates recommended under 1 (a), provided that where in the opinion of a District Board the continuance of an allowance or portion thereof is justified the matter be referred to the Executive Committee for consideration.

(c) That the capitation rate applicable to Railway Medical Officers in urban areas be increased by 2s. per beneficiary per annum and in rural areas by 1s. per beneficiary per annum.

2. That Railway Medical Officers, Specialists and General Practitioners be permitted to charge for the treatment of cases falling within the provisions of the Motor Vehicle Insurance Act.

Decided: That consideration of this request be deferred pending the submission of the Investigation Officer's report arising out of discussions with the Chief Legal Adviser.

3. That the rate for mileage allowance for journeys undertaken by motor-car for the purpose of attending servants and beneficiaries on a section of line be increased to 1s. per mile similar to that paid to District Surgeons.

Decided:

(a) That a flat rate of 1s. per mile in respect of motor hire be paid to Railway Medical Officers on line sections.

(b) That in respect of those appointments where more than 1s. per mile is paid, such rates will continue to be paid as

personal to holder but will revert to 1s. per mile when new appointments are made.

(c) That consolidated transport allowances on line sections be reviewed by District Boards for submission to the Executive Committee if any increase is recommended.

(d) That consolidated transport allowances in urban areas remain as at present.

4. That the allowance payable to Railway Medical Officers who have completed 15 years' service in connection with the provision of a locum tenens be increased from £2 2s. to £3 3s. per diem, and for specialists to £5 5s. per diem.

Decided:

(a) That the amount payable in terms of Sick Fund Regulation No. 74 to a Railway Medical Officer other than a specialist in respect of the provision of a locum tenens be increased from £2 2s. to £3 3s. per diem.

(b) That the amount payable in terms of Sick Fund Regulation No. 74 to a Railway Medical Officer who is a specialist in respect of the provision of a locum tenens be increased from £2 2s. to £5 5s. per diem.

5. A request to rescind the resolution passed by the Cape Midlands District Board re a compulsory 6 months' partnership for future Assistant Railway Medical Officers in that system.

Decided: That as there is no trace of such a resolution, the request of the Group falls away.

6. A special fee per call to be paid for night calls between 7 p.m. and 7 a.m. for reconsideration.

Decided: That this request be declined.

7. That the fees for (a) entrance examination, (b) examination for appointment to permanent staff, (c) re-examination, be raised to 10s. 6d. each.

Decided: That the fees for (a) entrance examination, (b) examination for appointment to permanent staff, (c) re-examination, be increased to 7s. 6d. per examination.

8. That non-operative cases, hospitalized from outside areas, treated by a Railway Medical Officer in that hospital area be paid for at £1 1s. per patient per month.

Decided: That the fee as provided for in terms of Sick Fund Regulation No. 79 (1) (e) remain as at present, i.e. £1 per case.

9. A request for free passes for Railway Medical Officers with 15 years' service who retire at 55 years of age—also for their wives.

Decided: That this request be declined.

10. That no complaints from members against Railway Medical Officers be considered by Sick Fund Boards unless handed in within 7 days, except in special circumstances of long and serious illness of member.

Decided: That the following words be added at the end of paragraph (1) of Regulation No. 81—

'except in special circumstances when the period of seven days may, in the discretion of a District Board, be waived.'

11. That the retiring age of Railway Medical Officers who are fit be extended to 65 years.

It was noted that since this matter was raised by the Group the conditions under which the Executive Committee will recommend that the services of a Railway Medical Officer be retained beyond the age of 60 years have been laid down and the request therefore falls away.

12. That Railway Medical Officers be paid a consulting room allowance.

This item has been disposed of under item 1 (a).

13. That Railway Medical Officers working on hospital staffs and nursing homes, be paid some fee for lumbar puncture also for blood transfusions where this is not paid.

Decided: That this request be declined.

14. *It should be incumbent on the Sick Fund to give reasons when a Railway Medical Officer is dismissed, and the contract should be altered accordingly.*

*Decided:* That this request be declined.

15. *In the interests of economy all Sick Fund benefits should only be obtained while patients are under the care of a Railway Medical Officer and patients going outside the services should be debarred from approaching a Railway Medical Officer with the request to authorize any benefits prescribed by an outside doctor.*

*Decided:* That this request be declined.

16. *That a pension scheme be introduced for Railway Medical Officers.*

*Decided:* That this request be declined.

17. *Increased remuneration for workshops surgeries should be granted.*

*Decided:* That this request be referred to the Investigation Officer (Sick Fund) for investigation and report with recommendations for the consideration of the Executive Committee.

18. *That the non-European capitation rate be increased pro rata with the European capitation rate.*

*Decided:*

- (a) That this request be referred to the Investigation Officer (Sick Fund) to be dealt with in conjunction with item No. 18 (d).

- (b) That in respect of non-European wives and children entitled to benefits the capitation rate applicable to Railway Medical Officers be increased from 2s. to 6s. per non-European per annum.

- (c) That the contribution payable by a non-European servant in respect of his wife and children be increased from 1s. per month to 1s. 6d. per month.

- (d) That an investigation be undertaken by the Investigation Officer (Sick Fund) with a view to the appointment of Railway Medical Officers to attend solely to non-Europeans at centres where Railway Medical Officers at present combine a large European and non-European practice.

19. *That those specialities which have been in existence in the Sick Fund for a period of not less than 5 years should have the capitation rates increased by 50%.*

*Decided:* That this request be agreed to and the capitation rates applicable to the undermentioned salaried specialists be increased as follows:

General Surgeons	from 4s. 6d. to 5s. 3d. per member
Physicians	from 2s. 3d. to 3s. 0d. per member
Gynaecologists	from 2s. 6d. to 3s. 0d. per member

20. *Where a General Surgeon undertakes Gynaecology and Aural Surgery at centres where no salaried appointments exist the General Surgeon should have his capitation increased by half the capitation rate.*

*Decided:* That at centres where a salaried surgeon is required to undertake Gynaecology and/or Aural Surgery due to there being no salaried specialists in those specialities, the Surgeon specialist concerned to have his capitation rate enhanced by one-half of the capitation rates applicable to these two specialists, but that this principle should not be applied to other specialities.

21. *Special consideration for Anaesthetists on the grounds that their services are required at various times and places binding them in such a way that private anaesthetics often had to be declined.*

*Decided:* That this request be agreed to and the capitation

rate applicable to salaried anaesthetists be increased from 3s. to 3s. 6d. per member.

22. *Special consideration for Radiologists in view of the capitation rate being an inclusive figure including steadily mounting costs in films, materials, etc.*

*Decided:* That this request be declined, but should a Radiologist be prepared to submit figures indicating the cost of films, drugs, materials, is now more than that for which provision has been made in the capitation rate, i.e. 2s. per member per annum, particulars should be submitted and the matter referred to the Investigation Officer (Sick Fund) for investigation and report to the Executive Committee.

23. *Decentralization of surgical work.*

*Decided:*

- (a) That in order to introduce decentralization of surgical work on a uniform basis the matter be referred back to the District Boards with a view to recommendations being received by the Executive Committee for decentralization being introduced at those centres where suitable hospital facilities exist and where Railway Medical Officers are able to perform at least 50% of the surgery which may arise.

- (b) That where it is decided to decentralize surgical work on the basis recommended in 23 (a), the capitation rate of a Railway Medical Officer undertaking surgical work be increased by 1s. 6d. per beneficiary per annum in respect of all beneficiaries resident in the decentralized area, which may include beneficiaries resident in medical districts adjoining the medical district of the Railway Medical Officer concerned, the matter to be reviewed in 12 months from the date of introduction.

- (c) That at centres where it is decided to decentralize surgical work, surgical allowances at present being paid be withdrawn.

- (d) That in respect of decentralized areas the capitation rates of the following salaried specialists be reduced as shown hereunder:

General Surgeons	} by 33 1/3%
Gynaecologists	
Anaesthetists	
Aural Surgeons	by 20%

- (e) That all Railway Medical Officers, irrespective of their salaries, whose medical districts have not been decentralized, be paid honoraria at the rate of £5 5s. per operation for emergency major operations, subject to the approval of District Boards, and that all surgical allowances not affected by decentralization be withdrawn.

24. *Operative dates.*

It was further decided that the operative date of the decisions contained in items 1 (a), 1 (b), 1 (c), 3 (a), 4 (a), 4 (b), 18 (b), 18 (c), 19, 20, and 21, be 1 April 1952, and in respect of other decisions with effect from a date to be decided upon.

This, gentlemen, concludes our representations and their results to date.

#### OTHER BUSINESS

##### Annual Meeting Agenda

I wish to take this opportunity of reminding Group Representatives of the desirability of requesting their Branch Secretaries to post to me, in good time, resolutions from their Branch Groups for the Annual Agenda. This will greatly assist to ease the Group Secretary's large amount of high-pressure work immediately before each Congress.

##### R.M.O. Group Election Results for 1951

Chairman: Dr. L. O. Vercueil (unopposed).

Vice-Chairman: Dr. H. Grant-Whyte.

Secretary-Treasurer: Dr. C. Cairncross (unopposed).

##### Branch Group Election Results for 1952

Branch	Representative	Secretary	Committee Member
1. Cape Western .. ..	Dr. W. P. Steenkamp .. ..	Dr. A. Gordon .. ..	Dr. J. R. Lee
2. Cape Midlands .. ..	Dr. J. C. Rabie .. ..	Mr. T. Wooldridge .. ..	Dr. v. d. Merwe
3. Cape Eastern .. ..	Dr. L. Jaffit .. ..	Dr. F. K. Gutsche .. ..	Dr. A. Z. Butt
4. Cape Northern .. ..	Mr. N. Kretzmar .. ..	Dr. J. H. Kretzmar .. ..	Dr. J. Kieser
5. Natal .. ..	Dr. Grant-Whyte .. ..	Dr. P. Johnson .. ..	Dr. C. Weinberg
6. O.F.S. .. ..	Dr. W. H. Herberg .. ..	— .. ..	Dr. J. Thomson
7. W. Transvaal .. ..	Dr. L. O. Vercueil .. ..	Dr. C. Cairncross .. ..	Dr. M. Cohen
8. E. Transvaal .. ..	Dr. C. H. H. Coetzee .. ..	Dr. E. Schwartz .. ..	Dr. D. de Villiers
9. S.W.A. .. ..	Dr. F. J. Marais .. ..	— .. ..	—

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Minutes of the last Annual General Meeting were posted to all Group members and published in the South African Medical Journal. A résumé of the result of our negotiations was posted to R.M.O.'s, and a large amount of correspondence was attended to during the past year.

#### Membership

Membership of the Group has remained static during the past year at 303 members. It is felt that Branch Group Secretaries should make renewed efforts to increase the membership of the Group. If the attention of non-members in their system was drawn to the fact that their increases in past years were due solely to the efforts of the R.M.O. Group, I think it would assist in inducing them to join the Group.

#### Financial Statement

Mr. Chairman and Gentlemen: Certified audited copies of the Financial Statement will be supplied to you for perusal. As you know, it was decided 2 years ago to reduce subscriptions of about half our members by 50% for a trial period

of one year. At the end of that year our bank balance had dropped, and in last year's report I recommended that this matter be given consideration this year. Over a period of 10 years a satisfactory bank balance had been built up. If 2 Ex. Co. Meetings had been called this year, this balance would have dropped by nearly half in the past 2 years. As R.M.O.'s received increased remuneration last year as well as this year, and as it is desirable to maintain a satisfactory bank balance, I would recommend that the Group revert to the usual 2 guineas subscription for all members. As there was no heavy expenditure for Ex. Co. meetings this year, funds remain satisfactory compared to last year's balance.

In conclusion, I wish to thank, on behalf of the Group and on my own behalf, all office bearers for their assistance and co-operation during the past year. This, gentlemen, concludes the Annual Report.

C. Cairncross

Hon. Secretary-Treasurer.

### PARLIAMENTARY COMMITTEE

#### MEMORANDUM ON WORKMEN'S COMPENSATION

The introduction of the Workmen's Compensation Act of 1941 was a progressive step and a boon to the working classes of South Africa. Insurance against injury, disability and permanent incapacity was to be effected by Government agencies, was to be compulsory, and was to apply to all sections of the population engaged in industry and also amongst the employees in agriculture requiring to use power-driven machinery. The whole outlook with regard to Workmen's Compensation was changed. The medical profession not only welcomed and gave its blessing to this piece of progressive social legislation but added its quota to the welfare of the Fund by negotiating the tariff or schedule of fees on a low scale in order to facilitate the introduction of the Act and to enable the Workmen's Compensation Act Fund to establish reasonable reserve funds to meet any unexpected emergency. Apart from these reasons the tariff was on a low scale because it was negotiated at a time of economic depression and during a war period, when the profession as a whole was most desirous not to embarrass the Government in introducing the scheme. It was in effect arranged according to pre-war values. At the time it was understood that the schedule of fees was experimental and was to be revised after a trial period.

Despite numerous objections to the low standard of fees by various Branches of the Medical Association, the Association abided by the decision of its Federal Council and accepted the schedule which inaugurated the workings of the Workmen's Compensation Act and Fund.

After the war, and following a period which was to enable conditions to adjust themselves to peace economy, the Medical Association considered that it was reasonable that the tariff should come up for review. This was considered necessary on the following grounds:

1. The initial schedule of fees was drawn up and put into effect in 1941 and was due to be revised after a period of working experiment.

2. The change from pre-war costs, which was the basis of the original schedule of fees, to post-war conditions made a review and upgrading overdue.

Our first meeting with the Workmen's Compensation Commissioner to review the tariff of fees and various other items in the Workmen's Compensation Act Handbook took place in December 1948. The discussions for amendment of the Schedule were prolonged and difficult. At this time the Commissioner agreed that we had a case but he felt he was limited by a financial framework. He stated that he could not possibly increase employees' contributions at that time, but that after attending to certain essential matters like increased compensation and rehabilitation he still had a small surplus. Our request at that time was for an increase of 25% on the schedule of fees, but the Commissioner said that he could grant 7½% from available funds, which we agreed to accept as a temporary measure with a promise that the situation would again come under review in 12 to 18 months' time.

For various reasons, including the difficulty in analysing the effect of the increase on the fund, no review could be undertaken before November 1952. At a meeting between repre-

sentatives of the Medical Association and the Commissioner a further 24% increase was offered, which made a total increase of 10%. We were informed that this was the Commissioner's last word. A revision of the schedule of fees was refused. When our discussions began with the Commissioner in 1949 it was contended that no review of the Schedule with a view to effective increase could be conceded at that stage for the following reasons:

1. A sufficient fund reserve had to be created to meet any serious emergency such as a major accident in industry. (In our various discussions we have frequently reiterated that the rate at which the Commissioner is building up his reserve funds is too rapid and unwarranted.)

2. The maintenance of a definite ratio 50:50 as between medical aid and compensation. The Commissioner quoted the workings of the Ontario Workmen's Compensation Act, on which the local Workmen's Compensation Act was based. We again refuted this by stating that the experience of the Ontario Act was not comparable to the South African Act because of a tremendous difference and variance in the working conditions in South Africa, which includes various racial groups.

3. That the Commissioner would be pressed by his co-participants in Workmen's Compensation Insurance, who were carrying nearly 1½ times the amount that he carried, to maintain a rigid economy and keep the costs down. In this latter matter as in the others the Commissioner had had a fair start since he had an initially low tariff. He had been given a lengthy trial period and this at a time when he could reasonably have expected medical costs to rise in conformity with the rise in costs in all other aspects of Workmen's Compensation work.

From every Group in the Association protests came accompanied by figures showing tremendous increases in costs of running a practice and in cost of living, and finally in August 1950 a 7½% increase was achieved. The subsequent increase of 24% offered is too niggardly and disproportionate to the cost factors outlined above to merit further consideration.

A notable event since the inception of the Workmen's Compensation Act Fund is that the Commissioner has granted a rebate of nearly half a million to industry during this period, and that he is prepared to offer a further rebate to industry if his accident experience warrants it. Whilst the Association is the first to applaud the intention of the Commissioner in his attempt to alleviate the distress of the injured workman by increasing disability payment and raising compensation rates, it maintains that neither an increase in these or in medical fees was granted, whilst the Commissioner found it possible to offer industry a rebate of half a million. Essentially this rebate was granted at the expense of the profession and the injured workman. Since negotiations have been proceeding for an increase the Commissioner has frequently indicated that he may have to arrange for medical attention on a different basis if the costs to the fund were to become too high, or if it were to become uneconomical. He would be driven to this by pressure from his co-participants and from his assessment payers.

In the main he contemplates a change-over to a full-time

scheme of medical officers to the Fund in the 10-12 industrial areas of South Africa, or alternatively allowing the assessment payers to contract out of the Act under the provision in Section 81 and to make their own individual private arrangements for suitable medical aid. This is contrary to the advice offered by the Commissioner in his Handbook suggesting a free choice of doctor by the injured workman.

The Commissioner has frequently informed us that he supports the principle of free choice of doctor in Workmen's Compensation work. It is the injured workmen's safeguard and without doubt has great advantages over an appointed full-time doctor. It would appear to us that the suggestion now made for a change-over to full-time medical officers has been introduced to try and force the hand of the medical profession. We think that such a step would be retrogressive and certainly not in the best interests of the workmen.

Our demands are modest and reasonable; our suggestions for a revision of the tariff are as follows:

1. Visit to Europeans at 10s. 6d. The present rate is 7s. 6d. plus 7½%: 8s. 2d.
2. Visit to non-Europeans at 7s. 6d. The present rate is 5s. plus 7½%: 5s. 7d.

An increase in specialist consultations in accordance with the increase outlined above.

3. A further revision of items in the tariff book to bring it nearer to the fees charged to medical aid societies for similar work.

From the various Branches of the Association frequent

protests have come in against the discrimination in fees for the same work performed on Europeans and non-Europeans. The Federal Council has resisted this pressure and has followed what is customary and traditional practice in South Africa, thereby relieving the Fund of considerable increase in costs.

The nominal fee for visits in private practice in 1940 was 10s. 6d. per visit. This fee has been raised and now the fee in private practice for a visit is from 15s. to £1. The preferential tariff fee for medical aid societies lays down a fee for a visit of 12s. 6d. to 15s.

The medical profession has always been willing to give its services to the poor, if necessary without charge, and a large amount of honorary work is done in the hospitals even to-day. The Workmen's Compensation Fund should be prepared to pay adequately for the medical services which are rendered to the injured and it is to be expected that the services can only be first class if the medical men employed are satisfied with the terms of this service.

We therefore request that there should be a revision of the tariff of fees which will take into account the experience of the working of the Fund and the economic changes in the past 10 years.

[This Memorandum was drafted by the Workmen's Compensation Committee and the Parliamentary Committee (Transvaal Group), and was submitted to the Minister of Labour, who received a deputation consisting of Dr. L. I. Braun, Mr. D. de Bruijn, Dr. E. Meltzer and Dr. J. H. Struthers on 23 June 1953.]

## PASSING EVENTS

Mr. B. W. Franklin Bishop, F.R.C.S., has disposed of his general practice in Kimberley and, accompanied by his wife, is proceeding overseas. Mr. Bishop is taking up an appointment as Registrar in the Nuffield Department of Plastic and Jaw Surgery at the Churchill Hospital, Oxford, under Professor Pomfret Kilner.

### SOUTH AFRICAN PAEDIATRIC ASSOCIATION

The South African Paediatric Association will be holding its First Congress in Durban from 20 to 22 August 1953. The Organiser of this meeting is Dr. H. L. Wallace, 1017, Salisbury House, Durban.

### MOTOR VEHICLE INSURANCE

Doctors who have attended persons injured in motor-car accidents sometimes find difficulty in getting payment of their fees. Attention is therefore called to Act No. 27 of 1952 which amends the Motor Vehicle Insurance Act No. 29 of 1942, Section 12 of which as amended reads:

'If the cost of the accommodation of any person in a hospital or nursing home, or of any treatment of or service rendered or goods supplied to any person is included in any compensation for which a registered company is liable under section eleven, the company shall unless that cost has already been paid, pay that cost direct to the person who is entitled to payment therefor and the said person shall be entitled to recover that cost from the company without any cession of action.'

It therefore appears that the doctor is entitled to recover his fee direct from the insurance company with which the owner of the car is insured. It may be well for the doctor to render his account to the insurance company in good time and before it has settled its liability to its client.

### CINEMA DEMONSTRATION

A reception was given on 7 July, at the Mount Nelson Hotel, by Mr. H. H. David, General Manager of Abbott Labora-

tories S.A. (Pty.) Ltd., and was attended by more than 200 doctors, who witnessed the first screening in South Africa of a sound film showing the action of a new antibiotic, Fumidil (Abbott) on the *Entamoeba histolytica*. The film, which was of 10 minutes' duration, showed the life of a live specimen of the amoeba over many hours. It created a great amount of interest, and was screened several times during the course of the evening, thus allowing doctors to attend at various times at their convenience.

Mr. David and Abbott Laboratories S.A. (Pty.) Ltd. are to be congratulated on this function, which was both interesting and successful and was greatly enjoyed by their guests.

### UNION OF SOUTH AFRICA

#### DEPARTMENT OF HEALTH

BULLETIN No. 29 of 1953, FOR THE 7 DAYS ENDED  
THURSDAY, 16 July 1953

#### PLAGUE

Nil

#### SMALLPOX

Nil

#### TYPHUS FEVER

Nil

#### EPIDEMIC DISEASES IN OTHER COUNTRIES

At date of latest available information there existed:

Plague: Nil.

Cholera in Calcutta (India); Chalna (Pakistan).

Smallpox in Bombay, Calcutta, Delhi, Madras, Masulipatnam, Nagapatinam, Kanpur (India); Lahore (Pakistan); Hanoi, Saigon-Cholon (Vietnam); Phnom-Penh (Cambodia); Pusan (Korea).

Typhus Fever: Nil.

## IN MEMORIAM

DR. KARL BREMER

*Dr. J. J. du Pré le Roux (Secretary for Health) writes:* The late Dr. Karl Bremer, Minister of Health from February 1951, reached the top flights in his profession and in politics but with it all remained human, courteous and accessible. Everyone who met him respected him, no matter how they might have differed from him.

He never made high demands from life but he enjoyed living. To him the everyday simple things deserved the same enthusiastic approach as the unusual.

Above all it was characteristic of him—in fact it was his philosophy—that in his personal association as well as in his professional and public life he preferred the simple to the complicated and involved.

He disliked unnecessary elaboration and from the day he assumed office as Minister he constantly strove for simplification. 'Perhaps Karl Bremer will some day be remembered for having simplified the administration of health services' he himself said to me on an occasion.

The Department of Health will honour his memory by adopting as its motto for departmental procedure his life's philosophy 'simplicity'.

*Dr. J. J. du Pré le Roux (Sekretaris van Gesondheid) skryf:* Wyle Dr. Karl Bremer, Minister van Gesondheid vanaf Februarie 1951, wat in sy professie sowel as in die politiek die hoogste sport bereik het, het tog altyd menslik, hoflik en genaakbaar gebly. Hy het die agting van almal met wie hy in aanraking gekom het, geniet, of hulle nou onderhorig, of andersdenkend of hoe ookal was.

Sonder dat hy ooit, sover dit hom betref het, hoë eise aan die lewe gestel het, het hy dit ten seerste geniet. Hy kon altyd die alledaagse, doodgewone dingetjies met eweveel geesdrif as die buitengewone aanpak.

Bo alles was dit kenmerkend van hom—trouens dit was sy lewensfilosofie—dat hy aan die eenvoudige en die ongekunstelde die voorkeur gegee het sowel in sy persoonlike omgang as in sy professionele en openbare lewe. Hy het 'n hekel aan onnodige fraaiings gehad en dit was, sedert die dag wat hy die Ministerskap aanvaar het, sy gedurige strewe om te vereenvoudig. 'Miskien sal Karl Bremer nog eendag outhou word omdat hy die administrasie van Gesondheidsdienste eenvoudiger gemaak het' het hy self by geleentheid aan my gesê.

Die Departement van Gesondheid sal sy nagedagtenis huldig deur sy lewensfilosofie 'eenvoud' die leuse vir departementele gedragslyn te maak.

*Prof. A. Piiper (Pretoria) skryf:* Ons sal nooit weer 'n man soos Karl Bremer hê nie. Hy was te uitstaande in menige opsig. En die moderne 'chaotiese en aggressiewe' wêreld sou ook nie 'n behoorlike tuiste aan 'n man van hierdie besondere geaardheid kan verskaf nie. Bremer se mees tipiese eienskap was sy menslikheid. Dit was diep en opreg. Hy was altyd human teenoor almal, en daar was niks mensliks wat hom vreemd gebly het nie.



Dr. Bremer.

Hy het 'n lang en ryk loopbaan gehad, vol van prestasies op velerlei gebied. Ek sal dit aan andere oorlaai om daar dieper op in te gaan. Vir my was sy vernaamste kwaliteit sy talent vir vriendskap, en dit het sy besondere prestasies moontlik gemaak.

Ek kan nie pretendeer dat ons intieme vriende was nie. Maar ek was nog altyd bly oor die mate van vriendskap wat ek van hom geniet het. Ek het altyd geglo aan helde-verering, en

Bremer was nou eenmaal een van my helde. As Bremer sê 'n ding was goed dan was dit moeilik vir my om daaraan te twyfel.

As ek 'n wapenspreuk vir hom moes uitgesoek het, dan sou dit die latynse *fortiter in re, suaviter in modo* wees. Met reg kan van hom getuig word dat hy *charity towards all, hatred towards none* gekoester het. Hy was wel die minste politieke politikus wat bestaan het. So ver ek Bremer geken het, was hy nooit deur enige *rancune* besiel nie, en was daar in hom geen gewelddadigheid nie. Sy vriende was legio, dit was amper hinderlik om met Bremer op 'n publieke plek te vertoef, daar was nooit 'n rustige tydjie nie, daar was altyd weer iemand wat tussen in kom en hande moet skud en 'n bietjie gesels.

Ons eerste kontak was jare terug. Ek het toenmalig tamelik

groot denke van my kennis van lepra gehad en toe die regering 'n parlamentslid sou stuur om Westfort te besoek, en ver wag het dat ek teenwoordig sou wees, het ek dit eers maar oorbodig gevind. Maar ek het gegaan en dit het heeltemal anders uitgedraai. Ek was gou onder die bekoring van parlamentslid Bremer se persoonlikheid en diep onder die indruk van sy kennis en begrip van die lepra-probleem. Ek het toe aangedring dat ek hom in my kar na Pretoria mag terugneem, en ons het lang gepraat en ek het besef dat ek hier te doen het met 'n buitengewoon veelsydige en karaktervolle mens. Dit was die begin van wat ek gehoop het 'n weder syde waardering was.

Die vriendskap het gegroei toe ons mekaar later op die Mediese Raad terugvind. Daar het ons gedurende 'n lang reeks van jare genotvolle ure deurgebring, op en na die vergaderings. Dit was merkwaardig hoe Bremer hier op 'n groot Raad, bestaande uit markante persoonlikhede, waarvan nie almal in politiek aan sy kant was nie, altyd weer tot voorsitter gekies is. Die oorgrote meerderheid van die lede het nooit daaraan getwyfel nie dat hy die regte man vir dié taak was. Ook hier het dus weer die persoonlikheid bo die politieke alliansie geseëvier. As ons dit net meer dikwels sou doen! Bremer het altyd die toewyding gehad van al die lede gedurende die jare dat hy die voorsitterstoel ingeneem het. Dit het die Mediese Raad tot heeltemal 'n aparte en besonder gelukkige liggaam gemaak. Bremer se werk op hierdie gebied is partykeer misverstaan en buite die Raad nooit volledig gewaardeer nie. Wat hy altyd nagestreef het, was in simpel woorde, die handhawing van die mediese eer en fatsoen, oortuig dat dit sou lei tot die beste diens vir die publiek. Sy versugting was menig keer dat die Mediese Raad seker nie volmaak was nie en seker foute gemaak het, maar wat sou van die mediese professie geword het sonder die Mediese Raad? En ons voeg dan toe: en sonder Karl Bremer as leier?

Sy benoeming as minister het te laat gekom. Ek dink hy het daar eerder op gehoop. Hy het altyd grote en grootste planne gehad omtrent volkswelsyn. Politiek heet partykeer 'die leer of die kuns van die moontlike'. As dit so is dan is dit diep betreuenswaardig dat die 'moontlike' vir Karl Bremer so gering gemaak is. Hy het 'n innige besef gehad van die trias wat die basis is van volkswelsyn: plek, kos en klere. Hy het sy uiterste gedoen, altoos soos ons glo, met te geringe middels, maar met groot vindingrykheid en taai volharding, om hier verbetering te bring en die sukses het

nie agterweë gebly nie. Hy het ook hier gewerk solang dit vir hom dag was.

Ek hoop dat daar op een of ander manier 'n gedenksteen vir Karl Bremer sal kom. Sy dood laat ons verarm agter. Kan sy vele vriende nie probeer om 'n bate te maak uit sy

nagedagtenis nie? Wat ook daarvan mag kom, daar is één groot ding in sy nalatenskap wat lank staande sal bly. Dit is dat menigeen van ons partykeer sommer beter gevoel het deur net te dink aan Karl Bremer en sy betekenis vir ons. Ons sal dit bly doen.

DR. ERIC WILSON DANBY SWIFT

*Dr. J. A. van Heerden (Cape Town) writes:* In the passing of Dr. Swift, there has been removed from the contemporary scene one of the first Specialists in Psychological Medicine in South Africa.

Dr. Swift was born in Yorkshire and he graduated at the London University. After a house appointment at University College Hospital he was for some time attached to Hanwell, one of the London County Council's Mental Hospitals. Here he was associated with Sir Frederick Mott.

He came out to an appointment at the Valkenberg Hospital over 50 years ago. Within a year he was transferred to Robben Island and in 1906 he was promoted to the post of Physician Superintendent at the Bloemfontein Mental Hospital. He succeeded Dr. C. G. Cassidy in 1923 as Superintendent of Valkenberg Hospital, where he remained until he retired in 1937.

After his retirement he compiled and edited the two Handbooks for the Nursing Staff of Mental Hospitals and Institutions for the Mental Defective. The Department of Health

was fortunate in having the services of Dr. Swift for this task. His colleagues and juniors had learned to admire his faultless diction and phrasing in his reports on mental patients.

Dr. Swift enlisted in World War II as a Psychiatrist and was stationed for varying periods at Durban and Potchefstroom.

Swift was a quiet, retiring and very diffident man. To his intimate friends he revealed a strong sense of humour. He was fond of telling his friends of incidents or jokes at his own expense.

He lived very quietly during the latter years of his retirement and was frequently seen in the South African Public Library. He was an omnivorous reader. He digested his medical journals and 'Practitioner' to the last and I was always amazed at his accuracy in forecasting international political events.

Our sympathy goes to his surviving widow and children, all three of whom are Medical Practitioners.

## REVIEWS OF BOOKS

### CONTROL OF YAWS

*First International Symposium on Yaws Control. World Health Organization Monograph Series No. 15. (Pp. 418, with 32 plates. 22s. 6d.) Geneva: World Health Organization, 1953.*

*Contents:* Part I. Biology of Yaws. 1. Biological Investigations on Treponemes. 2. Non-Specific Factors in the Epidemiology of Yaws.

Part II. Antibiotics in the Treatment of Yaws. 3. The Treatment of Infectious Yaws with One Injection of Penicillin. 4. Time-dose Relation in Penicillin Therapy with Special Reference to Yaws. 5. Laboratory Basis for Effective Therapy. 6. Clinical Basis for Effective Therapy. 7. Antibiotics Other than Penicillin in the Treatment of Yaws.

Part III. Extent and Nature of the Yaws Problem. 6. Extent and Nature of the Yaws Problem. 7. Le plan dans les territoires africains français.

Part IV. Development of Plans of Operation. 8. Planning for Yaws Control in South-East Asia. 9. Yaws in Brazil.

Part V. Demonstration, Survey and Training Phase. 10. Diagnostic Aids in Mass-Treatment Campaigns Against Yaws.

Part VI. Expansion Phase. 11. La campagne antipianique en Haiti. 12. Experience with Yaws Control in Indonesia: Preliminary Results with a Simplified Approach.

Part VII. Consolidation Phase. 13. Consolidation Phase of Yaws Control: Experiences in Africa. 14. Integration of Yaws Control into the Permanent Health Structure of the Philippines. 15. Yaws Control—An Opportunity for Promoting Rural Health-Services.

Part VIII. Role of International Organizations. 16. The Role of the World Health Organization in Yaws Control. 17. The Role of the United Nations International Children's Emergency Fund in Yaws Control.

Eighteen of the papers, together with summaries of some of the discussions at the First International Symposium on Yaws Control, held at Bangkok, Thailand, in March 1952, have been published in the *World Health Organization: Monograph Series*. Among the subjects of the articles and discussions included in this monograph are the biology of yaws, antibiotics in the treatment of this disease, the role of international organizations in assisting governments in their efforts to control yaws, and the 5 phases of a yaws-control project: (1) preliminary analysis of the extent and nature of the problem, (2) development of plans of operation suitable to local conditions, (3) demonstration, survey, and training, (4) expansion of the project into a mass-treatment campaign, and (5) consolidation, in which the yaws-control programme is integrated into the permanent health structure of the area concerned. These various phases of control projects are illustrated by experiences in specific countries or regions—Africa, Brazil, Haiti, the Philippines, and South-East Asia (Indonesia, Thailand)—and successful control campaigns, based on mass treatment with repository penicillin preparations, are described.

### MOLLUSCICIDES

*Molluscicides. By Alan Mozley, D.Sc., Ph.D., F.R.S.E. (Pp. 87 + viii, with 10 illustrations. 9s.) London: H. K. Lewis & Co. Limited, 1952.*

*Contents:* 1. The Field for Molluscicides. 2. Possible Dangers to Human Beings. 3. Practical Considerations in the Use of Molluscicides. 4. Molluscicides of Vegetable Origin. 5. Synthetic Organic Molluscicides. 6. Inorganic Molluscicides. 7. Methods of Application. 8. Destruction of Field Pests. 9. Emergency Measures. 10. Discussion. 11. Conclusion. Addendum. Literature. Appendices. Index.

A great deal of poverty and ill health in many of the warmer parts of the world is due to the 2 diseases, liver rot (*fascioliasis*) in animals and bilharzia (*schistosomiasis*) in man. The snails which transmit these diseases can be killed by different kinds of molluscicides. Some of the newer organic synthetic drugs are highly poisonous to man and domestic animals. Molluscicides of vegetable origin have not been explored sufficiently.

The author, from practical experience in the field in different countries, concludes that copper is by far the best substance for killing snails. Health authorities and others interested in the destruction of snails and other molluscs, will find this book a valuable guide.

### MEDICAL EXAMINATION QUESTIONS

*Rypin's Medical Licensure Examinations: Topical Summaries and Questions. By Walter L. Biering, M.D., F.A.C.P., M.R.C.P. Edin. (Hon.) Seventh Edition. (Pp. 856 + xvi. 65s.) Philadelphia, London, Montreal: J. B. Lippincott Company, 1952.*

*Contents:* 1. Medical Qualifying Examinations. Part I. Basic Medical Sciences. 2. Anatomy. 3. Physiology. 4. Biochemistry. 5. Microbiology. 6. Pathology. 7. Pharmacology. Part II. Clinical Sciences. 8. Surgery. 9. Medicine. 10. Obstetrics and Gynecology. 11. Preventive Medicine and Public Health. 12. A Synopsis of the Scope, Goal and Content of Psychiatry. Index.

In this book a summary is given of each of 13 major medical subjects, and questions based on the essential facts in each summary immediately follow the review presented. It is taken for granted that the student has been trained adequately in the medical sciences.

The object of the book is to assist him in selecting and arranging his material intelligently and practically. Nearly all technical procedures have been omitted deliberately. Repeti-



tion has been avoided and an effort made to cover the requirements of the medical curriculum concisely. Unfortunately the teaching and the requirements in different countries and in different schools in the same country do vary, so that this type of book can only partially assist the examinee. The undergraduate and post-graduate student in South Africa will find this book useful for rapid, albeit incomplete, revision of the basic and clinical medical sciences. Harry Goldblatt covers the field of *Pathology*, Markee deals with *Anatomy and Physiology*, and other subjects are similarly considered in brief fashion (60 to 70 pages each) by members of the review panel.

It is hoped by the Editor that the publication will also interest the examiner and the medical educator in the material generally agreed upon among examiners (and if in America, why not here?) to be essential for the candidate.

#### DERMATOLOGY

*Dermatology: Essentials of Diagnosis and Treatment.* By Marion B. Sulzberger, M.D., and Jack Wolf, M.D. (Pp. 592, with illustrations. \$10.00) Chicago: The Year Book Publishers Inc.

*Contents:* 1. General Dermatologic Management. 2. Eczematous Dermatoses. 3. Urticaria—Giant Hives. 4. Atopic Dermatitis. 5. Dermatoses due to Fungi. 6. Acne Vulgaris and Other Acneiform Dermatoses. 7. Psoriasis. 8. Sulfonamides, Calciferol, Cortisone-ACTH. 9. Psoriasis and Seborrheic Dermatitis. 10. Bullous and Vesicular Dermatoses. 11. Zoonoses. 12. Common Tumours of the Skin. 13. Miscellaneous Dermatoses. 14. Drug Eruptions. 15. Miscellaneous Skin Disorders. 16. Early Syphilis. 17. Other Forms of Syphilis.

For more than 12 years Sulzberger and Wolf's *Dermatologic Therapy in General Practice*, the immediate predecessor of the present work, was acknowledged as one of the best books in its sphere. As the result of recent research and experience there have been many additions to and alterations in the treatment of the common diseases of the skin. In this production the text has been revised completely; new lines of treatment, e.g. cortisone, ACTH, the antibiotics, mepacrine, etc., are evaluated expertly, and the established older lines of therapy are examined critically. To complete the revision the authors have changed the title to the present more definite one.

It is pointed out that because of the accessibility of the skin, the percentage of good results obtained in dermatology is perhaps greater than that in any other branch of medicine. At the same time the skin lesion, because of its visibility, offers the most incontrovertible evidence of diagnostic or therapeutic failure. Correct diagnosis, while important for therapeutic success, is not enough without a sound knowledge, as taught in this volume, of exactly how to use the particular treatment indicated.

The busy general practitioner or the embryo dermatologist will find this book ideally suited for his needs. After reading it he should be able to deal with confidence with 90% of the skin diseases encountered in his practice. He could not wish for a more authoritative, up-to-date, concise and orderly introduction to dermatology and its treatment.

#### BOOKS NOTED

*Aids to Medical Diagnosis.* Dr. G. E. Frederick Sutton, M.C., M.D., F.R.C.P. (Pp. 346 + viii, with 45 illustrations. 7th Edition. 7s. 6d.) London: Baillière, Tindall and Cox.

#### BIOCHEMICAL TESTS

*Scope and Interpretation of the Commoner Biochemical Tests.* By the Biochemical Department, South African Institute for Medical Research. (Pp. 120 + iii, with illustrations. 10s. 6d.) Johannesburg: S.A. Institute for Medical Research. 1952.

*Contents:* 1. Blood. 2. Cerebrospinal Fluid. 3. Faeces. 4. Gastric Analysis. 5. Transudates and Exudates. 6. Urine. 7. Carbohydrate Metabolism. 8. Endocrine Function Tests. 9. Liver Function Tests. 10. Renal Function Tests. 11. Water, Acid-Base and Electrolyte Balance. 12. Summary of Normal Biochemical Findings in Body Fluids and the Principal Variations in Disease. Index.

Among the essentials for a satisfactory service in chemical pathology is the co-operation of the clinician in choosing tests appropriate to the investigation of the individual patient. To do this the doctor must have some knowledge of the tests and their applications and limitations. Without this the private patient may be put to needless expense and the laboratories of

public institutions get into danger of foundering under a flood of request forms.

This small book is written to help the doctor to decide which test is likely to be fruitful. It also gives an account of the results which may be expected in disease and their physiological basis.

The material has been derived from larger standard works and has been condensed and reviewed in the light of experience at the Institute.

#### HUMAN MILK

*Human Milk.* By S. D. Morrison, B.Sc. (Pp. 91 + viii. 10s. 6d.) England: Commonwealth Agricultural Bureaux.

*Contents:* 1. Volume of Milk. 2. Composition of Milk.

The individual variation in yield and composition of breast milk is a subject of more than academic interest. Much work has already been done on milk analysis and the study of the factors which influence its production. Past workers have often published contradictory figures and there was definite need for further information. The present monograph was sponsored by the Commonwealth Agricultural Bureaux.

A comprehensive review of the subject has been produced with an attempt to assess the significance of the previous work. This is a valuable contribution to the literature on the subject.

#### ORAL ANATOMY

*Oral Anatomy.* By Harry Sicher, M.D., D.Sc. Second Edition. (Pp. 529, with 310 text illustrations, including 24 in colour. £5 14s. 9d.) St. Louis: The C.V. Mosby Company. 1952.

*Contents:* Part I. Descriptive Anatomy. 1. The Skull. 2. The Muscles of Head and Neck. 3. Temporomandibular Articulation. 4. Viscera of Head and Neck. 5. Blood Vessels of the Head and Neck. 6. The Lymphatic System of Head and Neck. 7. Nerves of Head and Neck.

Part II. Regional and Applied Anatomy. 8. The Palpability of the Facial Skeleton. 9. Structure and Relations of the Alveolar Processes. 10. Anatomy of Local Anesthesia. 11. Arterial Hemorrhages and Ligation of Arteries. 12. The Propagation of Dental Infections. 13. Tracheotomy and Laryngotomy. 14. The Temporomandibular Articulation. 15. The Edentulous Mouth. Index.

This book is a standard American text-book of Anatomy for students of dentistry. It is produced and illustrated on the liberal, even lavish, scale to which we have become accustomed in the best American texts. While the emphasis of the book lies towards the teeth and jaws, which are exhaustively discussed, the general anatomy of the head and neck is not neglected. The last chapters of the book describe applied aspects of the subject, and here again the illustrations are profuse and clear.

The British reader of such a book soon becomes aware of differences of style which sometimes make the text appear to him obscure in its meaning. It is interesting to observe this, for it is quite unlikely that there was any obscurity in Dr. Sicher's mind when describing his chosen field of work. Semantic and stylistic differences between certain British and American writers must be more radical than one is inclined to imagine.

In the Preface to the first edition Dr. Sicher explains his omission of references. It is permissible to differ from him, and I think his omission a pity. Nobody wants from him a complete bibliography of the subject, but rather a select list of contributions which he considers to be of real value, whether old or recent. Such a list is of inestimable value to the student, and helps him to form a standard of judgment, so necessary to prevent him from drowning in the flood of medical writing constantly pouring down on his head.

#### POLYGLOT MEDICAL QUESTIONNAIRE

*Polyglot Medical Questionnaire.* By S. Chalmers Parry, M.A. (Cantab.), M.R.C.S., L.R.C.P., D.P.H. (Pp. 62. 12s. 6d.) London: H. K. Lewis & Co. Limited. 1953.

*Contents:* Foreword by M. T. Morgan, C.M.G., M.D., D.P.H., M.O.H. Port of London. Preface. 1. General Application and Use. 2. Descriptive Notes Relating to the Medical Questionnaire. 3. Explanatory Note in Three Languages. 4. Model Schemes in Eight Languages. 5. Medical Text in Twelve Languages.

This book is devised for the purpose of obtaining clinical histories from patients (or others) who do not speak the same



language as the doctor, nurse, orderly or layman interrogating them and for giving instructions to them. It is intended for the interviewing of such persons as passengers, crews, refugees, prisoners-of-war and immigrants; and for use not only by hospital staffs, ship-surgeons, health officers of ports and aerodromes, etc., but also for immigration authorities, consulates, shipping agents and masters of ships carrying no doctor.

It comprises a medical text in 12 languages, viz., English, German, Dutch, Norwegian, Swedish, Danish, French, Spanish, Italian, Portuguese, Russian and Polish. This text includes 191 items (sentences, phrases and words) which are repeated in the 12 languages in 12 vertical columns so arranged that each item occurs successively in a horizontal line.

This table is to be used by the 'digital' system and not phonetically. The words are to be pointed to in the language known to the reader. They need not be uttered. The questions are so constructed as to evoke a reply 'Yes' or 'No', or in the form of a number, which would be indicated by counting on the fingers or by writing down a figure.

The book also includes practical illustrations (in 8 languages) of the use of the table; one for example is in connexion with the investigation of a case of suspected smallpox.

The author has spent many years in devising systems for surmounting the barrier of language in his posts as ship-surgeon, port M.O. and Inspector of Aliens, and M.O. i/c Displaced Persons.

The volume is of a size and shape convenient for the pocket.

#### CANCER

*Living with Cancer.* By Edna Kachele. (Pp. 160. 8s. 6d.) London: Victor Gollancz Limited.

The cancer patient, apart from physical pain, suffers severe mental agony and frequently regards his case as a lost cause.

The author stresses the importance of this psychological factor by stating that the first step in learning to live with cancer is to forget your fear of increasing pain. Great stress is also laid on the proper diet, particularly as regards the replacement of lost proteins.

The author, a cancer victim, was prompted to produce this beautifully written book and describe her reactions and her mental approach to the disease.

This book is strongly recommended to medical men and to selected sufferers from cancer.

### CORRESPONDENCE

#### THE REGISTRATION OF SPECIALISTS

*To the Editor:* I have read your editorial on the *Registration of Specialists* which appeared in the *Journal* of 4 July 1953 with great interest. But what interested me most was the concluding sentence 'The Minister of Health (Dr. Karl Bremer) has announced his intention of asking the Cabinet for authority to seek the necessary new legislation' to give the rules of the Medical Council about the registration of specialists the force of law.

I have seen the Minister's intentions published nowhere else and I feel that most of my colleagues will be equally surprised to hear of it. The *Journal* has obviously privileged sources of information, and for that reason I should be glad if the Editor would further tap these sources to the extent of finding out for us:

(1) Whether the Minister has approached the Medical Association in order to discover if the members are satisfied with the prevailing state of affairs in connexion with the Specialists' Register and if they feel that a referendum should be taken to continue it in the same form as before;

(2) Whether he knows if the general practitioners who form the bulk of the profession are satisfied with a policy so heavily weighted against them in that

- (a) they have been taken off the hospital staffs where they had the possibility at least of qualifying as specialists;
- (b) specialists encroach upon their work to the extent, in the case of some paediatricians for example, of even doing house visits;
- (c) with no post-graduate hospitals in the country, posts in hospitals are taken up by aspiring specialists to the detriment of ordinary qualifying interns or the qualified man wanting to bring his work up to date;

(3) Whether the Minister does not consider that the conditions as laid down at present for inclusion in the Specialists' Register are possible only for the rich man's son who can afford a lengthy period of study without the need to earn money;

(4) And whether the Minister has inquired if the Medical Benefit Societies are not finding difficulty in meeting the fees demanded by specialists for treatment well within the scope of the G.P. at G.P.s' fees.

Trinity, 1918.

7 July 1953.

[The reference to the Minister's announcement was taken from a report in the daily press and was not derived from any privileged source of information.—Editor.]

#### THE SHORTAGE OF HOSPITAL BEDS

*To the Editor:* No one connected in any way with the practice of medicine in this country need be reminded about the tragic shortage of hospital beds that exists to-day.

Obviously this deficit can only be remedied by the provision of more hospital facilities (neglecting, for the moment, social circumstances as an aetiological factor in disease) and it is indeed futile to speculate about the large sums of money readily available for what are, by comparison, trivialities, in contrast with what is available for the treatment of disease.

But there is one way by which the staggering and mounting cost of providing hospital beds can, temporarily, be circumvented. And I don't think that this aspect has been sufficiently ventilated before. That is by the provision of Convalescent Hospitals—at least as a temporary short-term measure.

We all know that after patients have been operated upon, or their symptoms treated, there is a varying period (days or weeks) during which they cannot reasonably be sent home; they have to be under observation, and they thus occupy a bed urgently needed by someone else. This applies to surgical cases in general, but particularly to assault cases (and to medical and other cases to a lesser extent).

A Convalescent Hospital would enable all these cases to be operated upon and moved immediately to the convalescent centre for observation and care, allowing the vacated bed to be immediately utilized once more; and so on. An important advantage, besides the increased turnover of cases, would be that this convalescent centre could be built very cheaply and expeditiously, of converted Nissen huts if necessary, and run very economically. Comparatively few nurses and housemen would be required.

Use could be made of medical students as additional help, and a tremendous advantage would be that general practitioners could be brought into this scheme as honoraries and registrars, and maybe even look after their own private cases. All this would help to keep down the maintenance costs. And these centres could be built speedily—in weeks or months, as opposed to years (or never) for hospitals.

For the Cape Peninsula, a central site, such as Pinelands or the Northern Suburbs, should be chosen, and the assistance of the municipalities concerned should be sought.

I strongly advocate the erection of a trial convalescent centre for the use, say, of non-European casualty and other cases, as an immediate necessity.

G. I. Anstey.

Bellville,  
Cape.  
8 July 1953.

# ANDROGYNON

BALANCED COMBINATION

## OESTROGEN—ANDROGEN THERAPY OF THE MENOPAUSE



ANDROGYNON Tablets provide, in a convenient single-dose form, both androgenic and oestrogenic hormones, in a physiologic ratio for the relief of menopausal symptoms. ANDROGYNON Tablets are also indicated as adjunctive therapy in disorders where anabolic functions are low; osteoporosis, fractures in aged persons and in cases of malnutrition. The advantage of combined therapy by ANDROGYNON lies in the exclusion of the undesirable masculinizing effects of androgen or troublesome endometrial conditions due to oestrogen.

ANDROGYNON TABLETS (0.02 mg. ethinyl oestradiol and 10 mg. methyltestosterone) in bottles of 20 and 100 scored tablets.



MANUFACTURED IN THE UNION OF SOUTH AFRICA BY  
**SCHERAG (PTY.) LIMITED, JOHANNESBURG**  
FOR AND UNDER THE FORMULA AND TECHNICAL SUPERVISION OF



*Schering* CORPORATION • BLOOMFIELD, N.J.

Prompt  
**SUBJECTIVE**  
Relief

Lasting  
**OBJECTIVE**  
Benefit

## Roter Gastric Ulcer Tablets

**ROTER TABLETS** bring a new efficiency to the therapy of peptic ulcer.

Not only do they maintain gastric acidity within normal limits, thus accelerating healing of gastric and duodenal ulcer; but they also exert a favourable influence on gastro-intestinal function.

ROTER Therapy has the great advantage of being ambulatory; has no undesirable side-effects; is frequently effective in cases resistant to other types of therapy.

You are invited to write for full information and a clinical trial supply.

IMPORTERS

**HARRY DELEEuw CO. (PTY.) LTD.**

P.O. Box 7, Maraisburg, Transvaal, South Africa.

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ALEX LIPWORTH LTD. Johannesburg, P.O. Box 4461; Cape Town, P.O. Box 4838;  
Durban, P.O. Box 1988.

Distributors for Rhodesia: GEDDES LTD. Bulawayo, P.O. Box 877;  
Salisbury, P.O. Box 1691.

ROTER

ROTER

# Optulle

(TULLE GRAS)

**STERILE • NON-ADHERING • IMPREGNATED  
DRESSINGS**

OPTULLE IS OF OUTSTANDING value for the treatment of burns, septic wounds, indolent ulcers, eczemas and similar skin troubles. Its wide-mesh gauze, impregnated with Balsam of Peru in an emollient base, permits free drainage of exudates, and the dressing requires only infrequent changing.

Optulle is a very effective first-aid dressing for burns, scalds, cuts and abrasions, and it finds a most satisfactory application in dressing skin grafts and in plastic surgery.

Optulle is non-adherent—removal is painless and causes no injury to delicate healing tissues. It is completely safe in the hands of the patient, as it contains no IRRITANT OR TOXIC SUBSTANCES.

*Manufactured by*

**PERIVALE LABORATORIES LTD.**

Perivale • Middlesex • England

*Sole Agents for the Union of South Africa  
and the Rhodesias*

**CHAS. F. THACKRAY (S.A.) (PTY.) LTD.**

• P.O. Box 816, CAPE TOWN  
and  
P.O. Box 2726, JOHANNESBURG

## MEDICAL PRICES:

24 Dressings 4" sq.  
5/- per tin  
Continuous Strips  
5 yds. × 8" wide  
12/- per tin





# In Rheumatic Diseases

especially Arthritic and Fibrositic Conditions and Gout, particularly in the chronic stage,

## LEUCOTROPIN

### IS THE SPECIFIC OF CHOICE

because—it has an *immediate* analgesic, antiphlogistic and antipyretic effect and increases Joint Mobility.

Leucotropin excretes Uric Acid and stimulates A.C.T.H. production.

Available in Ampoules of 5 c.c. or 10 c.c. and Tablets.

#### EACH AMPOULE OF 10 c.c. CONTAINS—

Phenylcinchoninate of Hexamine	-	gr. 23 (1.5 Gm.)
Hexamine	-	gr. 26 (1.7 Gm.)
Sodium Salicylate	-	gr. 4 (0.3 Gm.)
Caffeine	-	gr. 1½ (0.1 Gm.)
Distilled Water	-	to 10 ml. (10 cc)

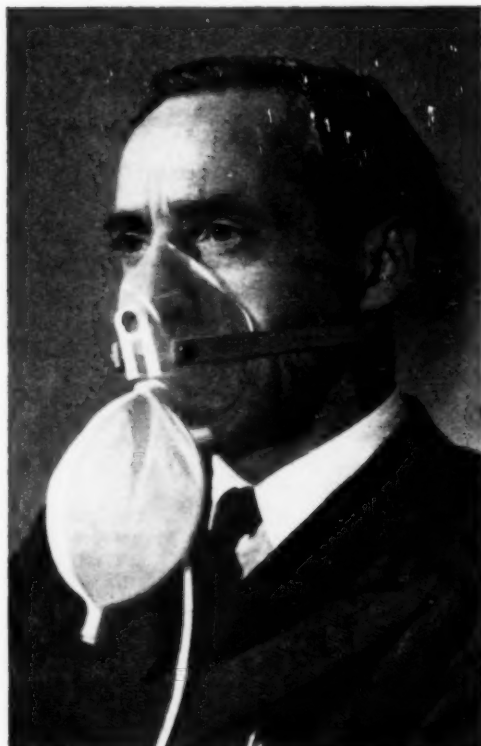
#### EACH TABLET CONTAINS—

Phenylcinchoninic Hexamine	-	gr. 5 (0.30 Gm.)
Phenylcinchoninic Quinine	-	gr. 2½ (0.15 Gm.)
Starch	-	gr. ½ (0.05 Gm.)

Literature and Samples from:

**French Distributing Co. (S.A.) (Pty) Ltd.**  
**P.O.B. 6681, Johannesburg.**

Manufactured by Silten Ltd., Hatfield, Herts, England.



# Oxygenaire

(South Africa) (Pty.) Ltd.

### THE "OXYAIR" FACE MASK

THE "OXYAIR" FACE MASK, WHICH HAS BEEN INTRODUCED INTO THE FIELD OF OXYGEN THERAPY BY OXYGENAIRE, HAS A THIN MOULDED FACEPIECE OF TRANSLUCENT PLASTIC. IT INCORPORATES A GAUZE VENTILATION HOLE, RESERVOIR BAG, A SMALL BORE PLASTIC TUBE FOR OXYGEN SUPPLY, AND THE WHOLE HAS ELASTIC SUSPENSION.

THE GAUZE-COVERED VENTILATION HOLE PROVIDES A MINIMUM RESISTANCE TO BREATHING AND ALSO CREATES A TURBULENCE WHICH IS AN ADVANTAGE AT HIGH INSPIRATORY AND EXPIRATORY FLOW. THE CONNECTION OF THE RESERVOIR BAG ON TO THE MASK IS SO DESIGNED AS TO AVOID ANY POSSIBILITY OF CLOSURE OF THE NECK OF THE BAG WHEN THE PATIENT IS IN A RECLINING POSITION. SHOULD THE OXYGEN SUPPLY FAIL, THE LOW RESISTANCE OF THE VENTILATION HOLE ENSURES ADEQUATE SUPPLY OF AIR. THE OVERALL WEIGHT OF THE MASK IS 2 OZ.

FURTHER PARTICULARS MAY BE OBTAINED FROM:

Enquiries:

53 Third Street, Bezuidenhout Valley, Telephone 24-6936, Johannesburg





## an improved approach to ideal hypotensive therapy

Low toxicity. The only hypotensive drug that causes no dangerous reactions, and almost no unpleasant ones.

Slow, smooth action. The hypotensive effect is more stable than with other agents. Critical adjustment of dosage is unnecessary. Tolerance to the hypotensive effect has not been reported.

Well suited to patients with relatively mild labile hypertension. A valuable adjunct to other agents in advanced hypertension.

Bradycardia and mild sedation increase its value in most cases. Symptomatic improvement is usually marked.

### *Convenient, safe to prescribe.*

The usual starting dose is 2 tablets twice daily. If blood pressure does not begin to fall in 7 to 14 days and the medication is well tolerated, the dose may be safely increased. Should there be a complaint of excessive sleepiness the dose should be reduced. Some patients are adequately maintained on as little as one tablet per

day. Dosage of other agents (veratrum or hydralazine) used in conjunction with Raudixin must be carefully adjusted to the response of the patient. If Raudixin is added to another maintenance regimen, the usual dose is applicable, and it is often possible to reduce the dose of the other agent or agents.

# RAUDIXIN

SQUIBB RAUWOLFIA SERPENTINA

*Further Information and Literature is available from*

**PROTEA PHARMACEUTICALS LIMITED**

P.O. BOX 7793 7, NEWTON STREET, WEMMER, JOHANNESBURG  
TELEPHONE 33-2211 ALSO AT CAPE TOWN, PORT ELIZABETH,  
EAST LONDON AND DURBAN

Supplied in tablets of 50 mg.  
bottles of 25 and 100.

**SQUIBB**

'RAUDIXIN'  
IS A TRADEMARK



## PETERVITE

Where B-Complex therapy is indicated, there is a PETERVITE product to meet individual requirements or preference.

### PETERVITE B TABLETS

Each chocolate-coated tablet contains:—

Thiamine Hydrochloride	2.0 mgm.
Riboflavin	1.5 mgm.
Pyridoxine Hydrochloride	0.25 mgm.
Calcium Pantothenate	2.5 mgm.
Nicotinamide	20.0 mgm.
Vitamin B <sub>12</sub> (Cyanocobalamin)	1.0 mcgm.

Bottles of 20, 60 and 500.

### PETERVITE ELIXIR

Each fluid ounce of orange flavoured wine base contains:—

Thiamine Hydrochloride	20 mgm.
Riboflavin	8 mgm.
Pyridoxine Hydrochloride	2 mgm.
Calcium Pantothenate	10 mgm.
Nicotinamide	80 mgm.
Vitamin B <sub>12</sub> (Cyanocobalamin)	10 mcgm.

Bottles of 8 oz. and 80 oz.

### PETERVITE COMPOUND INJECTION

Each 2 c.c. ampoule contains:—

Thiamine Hydrochloride	10 mgm.
Riboflavin	2 mgm.
Pyridoxine Hydrochloride	5 mgm.
Calcium Pantothenate	5 mgm.
Nicotinamide	100 mgm.

Boxes of 6 x 2 c.c. ampoules.

Manufactured in South Africa by



Established 1842

P.O. Box 38 CAPE TOWN	13, Umbilo Road DURBAN	P.O. Box 986 BULAWAYO	P.O. Box 5785 JOHANNESBURG
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## Transvaal Provincial Administration

### VACANCIES: TRANSCAAL PUBLIC HOSPITALS

Applications are invited from suitably qualified candidates for the undermentioned posts at public hospitals in the Transvaal.

Applications should be addressed to the Medical Superintendents of the hospitals concerned and should contain full particulars as to the age, professional and academic and language qualifications, experience and conjugal status of the applicant and should further indicate the earliest date upon which duties can be assumed. Copies, only, of recent testimonials to be attached.

Cost-of-living allowance payable at present to full-time employees:

Salary	Cost-of-Living Allowance Married	Single
Over £350 per annum	£320 per annum	£100 per annum

Full-time employees receive in addition to their salaries and cost-of-living allowance, the following privileges:

Leave and rail concession.

Successful candidates will be required to submit satisfactory certificates as also to submit to a medical examination at the hospital concerned.

Application forms are obtainable from any Transvaal Provincial Hospital or the Provincial Secretary, Hospital Services Branch, P.O. Box 2060, Pretoria.

The closing date of applications for undermentioned posts will be 17 August 1953.

Hospital	Post	Emoluments	Remarks
Edenvale, P.O. Raedene	Part-time Neuro-psychiatrist (1)	£205 p.a.	Registered medical practitioner. Must be suitably qualified through training and experience. One session per week.
Johannesburg	Assistant Orthopaedic Surgeon (1)	£1,200 x 50 —1,500	Registered medical practitioner. Higher qualifications in surgery a recommendation.
Coronation Hospital Board and the University of the Witwatersrand	Surgical Registrar (1)	£620, 780, £820, £860	Registered medical practitioner. Must be qualified for at least two years.
Johannesburg	Orthopaedic Registrar (1)	£620, £780, £820, £860	Registered medical practitioner. Must be qualified for at least two years.
Tara Hospital Board and the University of the Witwatersrand	Neuropsychiatric Registrar (1)	£620, 780, £820, £860	Registered medical practitioner.
Krugersdorp	Clinical Assistant (Department of Orthopaedics) (1)	£620, £780, £820, £860	Registered medical practitioner.

(41814)

### Practice for Sale

Well-established practice for sale in Port Elizabeth area. Deceased doctor's estate. Practitioners interested should communicate with the Port Elizabeth Board of Executors, P.O. Box 466, Port Elizabeth, from whom further particulars may be obtained.

### Practice for Sale

Cape Town: Recently established surgery in Southern suburbs. For immediate sale. Owner has taken on an assistantship. Write 'A. R. P.', P.O. Box 643, Cape Town.

# The Medical Association of South Africa : Die Mediese Vereniging van Suid-Afrika

AGENCY DEPARTMENT : AGENTSAP-AFDELING

## JOHANNESBURG

Medical House, 5 Esselen Street. Telephone 44-9134-5, 44-0817  
Mediese Huis, Esselenstraat 5. Telefoon 44-9134-5, 44-0817

### ASSISTENTE/PLAASVERVANGERS VERLANG ASSISTANTS/LOCUMS REQUIRED

(L/V411) An assistant to start 15 August. A house will be available. Details on application.

(L/V412) Assistant required for O.F.S. partnership practice. Must be bilingual. As there is a view to partnership, only applicants who have had reasonable G.P. experience need apply. Salary offered £100—£150 p.m. depending on experience.

(L/V413) An assistant to start as soon as possible. View to partnership. Salary and commission to be discussed. Near Johannesburg.

(L/V414) An assistant required for a Johannesburg partnership practice. Preferably ex-service man. Salary and allowances to be discussed.

(L/V418) Eastern Transvaal. An assistant to start as soon as possible. Salary £90 per month, plus free petrol and oil. Very little travelling and practically no night work. Excellent prospects.

(L/V419) Assistant required for Reef town. To start 1 September. Own car necessary. Salary and allowances to be discussed. Must be bilingual.

(L/V420) Country partnership practice. Locum for October. Salary £2 12s. 6d. per day, free petrol and oil and board and lodging plus £10 car allowance. Will suit newly qualified man.

### PRAKTYKE TE KOOP : PRACTICES FOR SALE

(Pr/S81) Oos-Vrystaat. Geen opposisie. D.G. aanstelling teen £425 p.j. Jaarlikse inkomste £2,500. Premie van £750 sluit praktyk-toerusting, instrumente en medisyne in. As volg betaalbaar: £300 kontant en balans op maandelikse paaime; die bedrag waarvan onderling gereel kan word.

(Pr/S82) Excellent non-European practice near Johannesburg. Established in 1944. Average annual net income £2,700 cash. Premium required is £2,000 and terms can be arranged. Premium includes contents of surgery and maternity ward.

(Pr/S83) Prescribing practice in Southern Rhodesia. Modern hospital. One transferable appointment at £300 p.a. Income —1951—£5,600; 1952—£6,200 and that of 1953 possibly in the region of £7,000 to £8,000. Excellent opportunity for man with surgical and maternity experience. House for sale or to let. Premium required £3,500 on terms or £3,000 cash.

(Pr/S78) Oud-gevestigde Vrystaatse praktyk met D.G. aanstelling. Gemiddelde jaarlikse inkomste oorskry £4,000. Premie van £2,000, sluit medisyne en apparate in. Uitstekende geleentheid vir 'n jong man.

(Pr/S84) Pleasant town in Northern Transvaal, with hospital facilities. General practice which was run by seller for 10 years besides a large non-transferable mine appointment. The appointment did not allow time for any Native work—only for very few district calls. Net cash income over £1,200 per year though only few hours daily were spent in this practice. Premium £500 on terms. Excellent start for young man.

(Pr/S85) Progressive Transvaal dispensing practice. Excellent surgical facilities. Average gross income £3,500 per annum. Premium required £2,500 and the following terms could be arranged: £1,250 deposit and the balance over a period of 18 months, starting 3 months after cash payment. The premium includes drugs, furniture and fittings, estimated at £800. Two transferable appointments worth £230 per annum. Scope for expansion.

(Pr/S86) Pretoria practice with two appointments. Annual income over £3,000. Long introduction will be given. Premium of £1,500 includes furniture, instruments and drugs. Terms will be accepted.

(Pr/S87) Wes-Transvaal. Uitstekende praktyk. Gemiddelde jaarlikse inkomste oorskry £3,000. Woonhuis en spreekkamers te koop of te huur teen £14 en £11 per maand, onderskeidelik. Premie verlang is £1,500 en terme kan gereel word. Skryf om volle besonderhede.

### INSTRUMENTS

A second-hand Corneal Microscope is required.

## DURBAN

112 Medical Centre, Field Street. Telephone 2-4049

### PRACTICES FOR SALE : PRAKTYKE TE KOOP

(PD13) Natal Lower South Coast practice, near Pondoland border, suitable for retired doctor. Area developing and large Police holiday camp in vicinity. Excellent climate and very good fishing. Premium required £400, includes good stock of drugs and dressings, instruments and dispensary furniture. House for sale £1,800, including stand of one-third morgen. Bond available. For immediate sale. Owner having taken a full-time appointment.

(PD15) General practice established 1941 at pleasant residential and seaside resort about 10 miles south of Durban. Annual income approximately £1,000. No major surgery, minimum of minor surgery and only emergency midwifery being done at present. Brick house with consulting room attached, for sale at £5,250. Owing to ill health owner wishes to retire from practice as soon as possible. Premium £1,000 including drugs, surgery and dispensary furniture.

(PD20) Natal South Coast. General mixed prescribing practice with 2 surgeries 11 miles apart. Premium £1,000 plus £200 for full equipment of 2 surgeries. Large proportion of the patients are European visitors, and Indians. A lucrative Native practice could be built up if dispensing was carried out. Immediate introduction.

(PD21) East Griqualand. General mixed practice with net profit of £3,000 annually. Excellent prospects. Premium £2,150.

(PD22) Natal. Prescribing and dispensing country practice. Total gross receipts for 1951, £3,344 15s. 9d.; 1952, £2,817 10s. 6d.; 1953 (3 months), £846 6s. 10d. Premium £1,500, includes drugs, consulting room furniture and instruments. House for sale £5,500.

(PD23) Natal. Prescribing practice particularly suitable for a woman doctor interested in obstetrics and gynaecology. Total gross receipts for 1950, £1,570; 1951, £1,595; 1952, (6 months), £1,340; 1953 (3 months), £382. Premium £1,250, includes furniture, fittings, instruments, drugs and existing book debts.

### PARTNER REQUIRED

(PDX) General Practitioner in Durban offers partnership preferably to one with experience. Capital necessary.

### ASSISTENTE/PLAASVERVANGERS VERLANG ASSISTANTS/LOCUMS REQUIRED

(138) Assistant required immediately in general country practice near Pietermaritzburg. £1,000 per annum. Two appointments. Very little surgery or midwifery. Should possess own car.

(139) Locum required Natal country practice. 30 August to 30 September. Must be bilingual and possess own car. £2 12s. 6d. per day, all found.

(140) Assistant immediately until end of year. Partnership of four. Experience in anaesthetics a recommendation. Hospital facilities available. Salary £100 per month.

\* \* \*

## KAAPSTAD : CAPE TOWN

Posbus 643, Telefoon 2-6177; P.O. Box 643, Telefoon 2-6177.

### PRAKTYKE TE KOOP : PRACTICES FOR SALE

(1356) Very well established CAPE TOWN SUBURBAN PRACTICE. Outright sale or alternatively partnership share available to Gentile purchaser. Excellent opportunity to acquire a good class practice. Details on application.

(1421) Klein Karoo. Praktyk geleë in ryk woldistrik. Geen opposisie. Spoorwegaanstelling teen £740 per jaar. Gemiddelde jaarlikse inkomste oorskry £2,500. Premie van £1,500 sluit in instrumente en medisyne.

### E.N.T. SPECIALIST

Partnership offered in a growing E.N.T. practice. Two appointments at present and a third would be available to the incoming man. Premium required £1,250.

**OPHTHALMIC PRACTICE FOR SALE**

(1325) Excellent opportunity to acquire expanding practice with two appointments. The area served is enormous and the population is steadily becoming specialist conscious. Present income approximately £3,000 per year. Possibilities for expansion are exceptionally good.

**CONSULTING ROOMS TO LET**

(1422) CONSULTING ROOMS TO LET, St. George's Street, Cape Town. Share waiting room, services nurse receptionist, sole use of one consulting room.

**KOOP VAN VENNOOTSKAPSAANDEEL**

(1110) 'n Geneesheer met 'n heel paar jaar ondervinding in sy eie algemene praktyk stel belang in 'n vennootskap verkieslik in 'n hospitaaldorp met 'n kollega wat taamlik snywerk doen. 'n Assistentiepraktyk met die oog op latere vennootskap sal ook oorweeg word.

**SPECIALIST SURGEON**

Surgeon to act AS A LOCUM IN A GENERAL SURGEON'S PRACTICE FOR SEPTEMBER AND OCTOBER. Details on application.

**City of Durban****VACANCY: EUROPEAN SENIOR CLINICAL MEDICAL OFFICER (FEMALE)**

Applications are invited for the abovementioned vacant position in the City Health Department.

The grade for the position is G.5 (£1,000 + 50—£1,200) subject to the operation of the City Council's Scheme of Deflation of Salaries and Wages and, in addition, a cost-of-living allowance at the rates applicable to the Public Service or the statutory rates, whichever rate is the higher, is being paid at the present time. At existing rates, this will give a total remuneration as indicated:

Emoluments (including C.O.L.A.)	Minimum	Maximum
Per annum	£1,100 0 0	£1,300 0 0
Per month	£91 13 4	£108 6 8

The appointment, which will be in terms of the City Council's general conditions of service and leave regulations, will be subject to the approval of the Minister of Health and to the successful candidate passing a medical examination to be conducted by one of the Council's Medical Officers.

The duties appertaining to this position generally relate to the various branches of maternal and child hygiene and the development of a family health programme for all races, including a very limited amount of sectional administration. The successful applicant will also be required to drive a motor car in the course of her duties.

Preference will be extended to candidates of less than 45 years of age.

The successful applicant will be required to become a contributing member of the Durban Corporation Superannuation Fund.

Applications from registered female medical practitioners, stating age, marital status, qualifications and experience, and accompanied by copies of not more than three recent testimonials, should reach the City Medical Officer of Health, 640 Smith Street, Durban, not later than 12 noon, on 15 September 1953.

Personal canvassing for appointment is prohibited and proof thereof will disqualify a candidate *vide* Council's Standing Order No. 1.

W. L. Howes  
Town Clerk

Town Clerk's Office  
Durban  
8 August 1953

**Partnership Required**

Well experienced gentle doctor urgently seeks partnership in larger country town, preferably Pietermaritzburg, Queenstown, East London or Pretoria. Write 'A. R. J.', P.O. Box 643, Cape Town.

**Vacant District Surgeoncy**

Applications for the undermentioned District Surgeoncy, accompanied by particulars as to date and country of birth, qualifications, experience and previous and present appointments of applicants, should reach the Secretary for South West Africa, Windhoek, not later than 24 August 1953.

Testimonials (copies) may be submitted, but canvassing by petition or otherwise should not be resorted to. The appointment is on a part-time basis and private practice is not precluded. Applicants should state whether they have a knowledge of both official languages. Surgical experience will be a recommendation. Applicants must state the earliest date on which duty can be assumed.

District: Gobabis.  
Headquarters: Gobabis.  
Salary: £360 p.a.

The salary mentioned covers all ordinary and routine services, but travelling allowance at 1s. 6d. per mile for all mileage travelled beyond a radius of 3 miles from headquarters, night detention at 22s. 6d. and supplementary fees for certain other services will be payable, also fees for attendance at courts and inquests in accordance with the tariff of the Administration's Branch of Justice.

Applications should be submitted on form Z.83 obtainable from Magistrates' offices.

(41809)

**Vakante Betrekking vir Distriksgeneesheer**

Applikasies vir die ondergenoemde pos van Distriksgeneesheer, met vermelding van datum en land van geboorte, kwalifikasies, ondervinding en vorige en teenswoordige aanstellings word deur die Sekretaris van Suidwes-Afrika, Windhoek, ingewag, en moet hom nie later as 24 Augustus 1953 bereik nie.

Getuiskrifte (afskrifte) kan ingestuur word, maar geen versoek om ondersteuning van applikasie word toegelaat nie. Applikante moet vermeld of hulle 'n kennis van albei amptelike tale besit. Die aanstelling is van 'n deeltydse aard en private praktyk word toegelaat.

Chirurgiese ervaring sal 'n aanbeveling wees. Applikante moet die vroegste datum meld wanneer hulle dienste kan aanvaar.

Distrik: Gobabis.  
Hoofkwartiere: Gobabis.  
Salaris: £360 p.j.

Die genoemde salaris dek alle gewone en roetine dienste maar reistoelae teen 1s. 6d. per myl vir alle afstande afgeleë buite 3 myl vanaf Hoofkwartiere, nagverblyf teen 22s. 6d. en bykomende vergoeding vir seker ander dienste word betaal, en ook vergoeding vir bywoning van Hofsettings en ondersoek, ooreenkomstig die tarief van die Administrasie se Afdeling van Justisie.

Applikasies moet ingedien word op vorm Z.83, wat van enige Magistraatskantoor verkrygbaar is.

(41809)

**Practice for Sale**

At present operated by a woman doctor, established just over a year. Rooms in Central Square block, Pinelands, Cape. Spacious surgery, waiting room, laboratory and dark room, complete with modern fittings and equipment. Rent £16 monthly. Equipment, instruments and drugs valued at £461. Furniture and fittings and typewriter £260; goodwill £100. Ample scope for expansion. Owner leaving to take up hospital appointment. For further particulars write 'A. R. R.', P.O. Box 643, Cape Town.

**Partnership Wanted**

Doctor wishes to purchase a partnership in well-established practice in Cape Town. Write 'A. R. O.', P.O. Box 643, Cape Town.



## Provincial Administration of the Cape of Good Hope HOSPITALS DEPARTMENT

### VACANCIES: HONORARY MEDICAL STAFF

Applications are invited from registered medical practitioners under the age of 60 years for appointment to the following posts on the honorary staff of the Livingstone Hospital:

- (a) *Department of Surgery.*  
Senior Honorary Surgeon.  
First, Second Assistant Honorary Surgeons (2).  
Clinical Assistants to department of Surgery (2).
- (b) *Department of Medicine.*  
Senior Honorary Physician.  
First, Second Assistant Honorary Physicians (2).  
Clinical Assistant to department of Medicine (1).
- (c) *Department of Otolaryngology.*  
Senior Honorary Otolaryngologist.  
Assistant Honorary Otolaryngologist.
- (d) *Department of Anaesthetics.*  
Senior Honorary Anaesthetist.  
Assistant Honorary Anaesthetist.
- (e) *Department of Dermatology.*  
Senior Honorary Dermatologist.
- (f) *Department of Ophthalmology.*  
Senior Honorary Ophthalmologist.  
Assistant Honorary Ophthalmologist.
- (g) *Department of Urology.*  
Senior Honorary Urologist.
- (h) *Department of Orthopaedics.*  
Senior Honorary Orthopaedic Surgeon.
- (i) *Department of Psychiatry.*  
Senior Honorary Psychiatrist.
- (j) *Department of Paediatrics.*  
Senior Honorary Paediatrician.
- (k) *Department of Obstetrics and Gynaecology.*  
Senior Honorary Obstetrician and Gynaecologist.

The appointments are subject to the Hospitals Ordinance No. 18 of 1946 (Cape), as amended, the rules and regulations of the Department and termination 1 year after the appointment of the Medical Committee of the Livingstone Hospital. Thereafter the Medical Committee will be asked to make recommendations in regard to the final staff establishment of the hospital.

Applicants must state whether they are prepared to accept appointment to alternative posts in each Department.

Applications containing full particulars of qualifications and experience, must be addressed to the undersigned to reach his office not later than 18 August 1953.

J. H. McLean  
Medical Superintendent

Provincial Hospital  
Port Elizabeth  
22 July 1953 (10343)

## Motor Industry Sick Benefit Fund

(TRANSVAAL AND ORANGE FREE STATE)

### PART-TIME MEDICAL OFFICER FOR HARRISMITH

Applications are invited from fully qualified registered general practitioners in respect of the abovementioned appointment.

The Fund operates on the closed panel system and the successful candidate will be required to provide consulting room, domiciliary and hospital service (when necessary) for members and their dependants. Further details will be furnished on request.

Applications must reach the Secretary of the Fund, P.O. Box 8477, Johannesburg, by Friday, 21 August 1953.

(Before applying for this appointment practitioners are advised to communicate with the Hon. Secretary, O.F.S. and Basutoland Branch (M.A.S.A.), P.O. Box 834, Bloemfontein.—Assistant Secretary, M.A.S.A.)

## Alexander Health Centre and University Clinic Entokozweni, Alexandra

### PART-TIME MEDICAL OFFICERS

A part-time appointment is vacant at each of the above institutions and applications are invited from suitably qualified medical practitioners.

Preference will be given to a person willing to accept both posts.

Information regarding salaries and conditions of service may be obtained from:

The Assistant Registrar,  
Faculty of Medicine,  
Medical School,  
University of the Witwatersrand.

Applications should be received not later than 24 August 1953.

(1590)

## Instruments for Sale

1. Brand new Spencer Binocular microscope, with full set eye pieces and objectives, oil immersion and mechanical stage. Beautifully boxed. Landed at £110, for resale at £145, before devaluation. Will send rail forward on first cheque received for £90.

2. Cox cavendish Galvanic and Faradic outfit in black carrying case. £7 10s. Rail forward.

3. Telescope by Watson, 3 in. objective, giving terrestrial magnifications of 40x and celestial of 60x and 180x. With large solid tripod. Vertical and horizontal adjustments. Ideal for anybody with a good view. Not new, but in good condition. £45. Rail forward.

4. Aldis Epivisor—new. Projects 35 mm. transparencies or printed matter, pictures, etc. Combined epidiascope and 35 mm. still projector. Listed price £103. Will accept £70.

5. New 500 watt, for projecting 2½ × 2½ colour or plain transparencies. Listed price £54 10s. Will accept £35.

Apply Reed & Champion Ltd., P.O. Box 774, Durban.

## South African Mutual Life Assurance Society

### REQUIRES

#### FULL-TIME MEDICAL OFFICER

Salary £2,000 per annum, plus cost-of-living allowance, the present rate of which is £320 per annum for a married man and £100 per annum for a single man.

Post requires full-time attendance during office hours, between 8.30 a.m. and 5 p.m., Mondays to Fridays only, and duties include examination of medical documents connected with the Society's business, duties relating to staff, medical examination of new staff, and such other medical examinations as the Directors may require.

Applicants, who should be fully bilingual and under 40 years of age in order to qualify for membership of staff Pension Fund, should submit in writing full details of qualifications and experience and the date on which duties could be assumed.

Applications must be in the hands of the Staff Department, S.A. Mutual, Darling Street, Cape Town, not later than 12 noon on 31 August 1953.

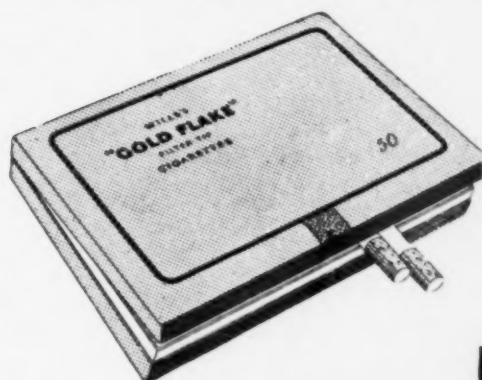
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UGF 63



## South African Railways and Harbours Sick Fund

### APPOINTMENT OF RAILWAY MEDICAL OFFICER: WARMBAD

Applications are invited from registered medical practitioners for appointment to the position of Railway Medical Officer, Warmbad and line section Pyramid (Exclusive) to Nylstroom (Exclusive) and to Tuinplaats (Exclusive), at a salary of £448 per annum, plus the fees and allowances prescribed by the Regulations of the Sick Fund, and with the right of private practice.

The salary will be subject to adjustment in accordance with the census of members to be taken on 1 April of each year.

The appointment will be made in terms of the Regulations of the Sick Fund, and will be subject to termination on 4 months' notice being given by either side.

The successful candidate will be required to reside at Warmbad, within the medical district, to take up the appointment on a date to be arranged, and to carry out his duties in accordance with the Regulations of the Sick Fund.

Applications should reach the District Secretary, Eastern Transvaal District Sick Fund Board, Scheiding Street, Pretoria, not later than 1 September 1953, and should state:

1. Full name.
2. Qualifications (when and where obtained).
3. Experience (when and where obtained).
4. Date of birth.
5. Country of birth.
6. Whether married or single.
7. Whether fully bilingual.
8. Whether South African citizen.
9. What Government appointment, if any, is held.

Canvassing by or on behalf of any applicant is liable to disqualify such applicant.

Any further particulars may be obtained from the District Secretary at the above address, on application.

G. Freeling  
Acting General Secretary

Johannesburg  
8 August 1953

### For Sale

In Bulawayo—modern 6-roomed furnished suite, compact and designed with special layout and fittings for a general practitioner, consultant or surgeon. For further particulars write 'A. R. B.', P.O. Box 643, Cape Town.

## S.A. Medical Journal S.A. Tydskrif vir Geneeskunde

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*Especially effective against gram-positive organisms*

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3. Cause toxic symptoms—none reported to date.
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